



basic education

Department:
Basic Education
REPUBLIC OF SOUTH AFRICA

Grade 3 Mathematics

Mental Starters Assessment Project (MSAP)

Mental Starters: Tasks and Assessments

TEACHER GUIDE: ISIZULU



Author team (alphabetically):

Mellony Graven, Hamsa Venkat,

Mike Askew, Lynn Bowie, Samantha Morrison, Pamela Vale

Acknowledgements:

Our thanks to the broader team who grappled with the author team to conceptualise these:

Lawan Abdulhamid, Noluntu Baart, Mark Chetty, Busi Goba, Corin Mathews, Zanele Mofu, Debbie Stott, Thulelah Takane, Herman Tshesane, Lyn Webb, Marie Weitz, Lise Westaway, Bob Wright.

Our thanks to the DBE and FRF for their support of this work.

This project was initiated and led by the two South African Numeracy Chairs, Professors Hamsa Venkat and Mellony Graven, at the University of the Witwatersrand and Rhodes University. It is based on research supported by the South African Research Chairs Initiative of the Department of Science and Technology and National Research Foundation (Grant Nos. 74658 and 74703). Any opinion, finding and conclusion or recommendation expressed in this material is that of the author(s) and the NRF does not accept any liability in this regard.



(2020) This work is licensed under a
Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International License.

OKUQUKETHWE

ISINGENISO	iii
UKUXHUMANISA KUSETSHENZISWA ISHUMI	1
Ukuxhumanisa kusetshenziswa ishumi: Isivivinyo sangaphambili.....	2
Ukuxhumanisa kusetshenziswa ishumi: Isifundo sokuqalisa 1 – 4.....	4
Ukuxhumanisa kusetshenziswa ishumi: Ishadi lomsebenzi 1.....	12
Ukuxhumanisa kusetshenziswa ishumi: Isifundo sokuqalisa 5 – 7.....	14
Ukuxhumanisa kusetshenziswa ishumi: Ishadi lomsebenzi 2.....	20
Ukuxhumanisa kusetshenziswa ishumi: Isifundo sokuqalisa 8.....	22
Ukuxhumanisa kusetshenziswa ishumi: Isivivinyo esandulelayo.....	24
AMASU OKWEQA.....	26
Amasu okweqa: Isivivinyo sangaphambili	27
Amasu okweqa: Isifundo sokuqalisa 1 – 4.....	29
Amasu okweqa : Ishadi lomsebenzi 1	37
Amasu okweqa: Isifundo sokuqalisa 5 – 7.....	40
Amasu okweqa : Ishadi lomsebenzi 2	45
Amasu okweqa: Isifundo sokuqalisa 8.....	47
Amasu okweqa: Isivivinyo esandulelayo	48
UKUPHINDA KABILI NOKUHLUKANISA PHAKATHI	50
Ukuphinda kabili nokuhlukanisa phakathi: Isivivinyo sangaphambili	51
Ukuphinda kabili nokuhlukanisa phakathi: Isifundo sokuqalisa 1 – 4	53
Ukuphinda kabili nokuhlukanisa phakathi: Ishadi lomsebenzi 1	62
Ukuphinda kabili nokuhlukanisa phakathi: Isifundo sokuqalisa 5 – 7	64
Ukuphinda kabili nokuhlukanisa phakathi: Ishadi lomsebenzi 2	69
Ukuphinda kabili nokuhlukanisa phakathi: Isifundo sokuqalisa 8	71
Ukuphinda kabili nokuhlukanisa phakathi: Isivivinyo esandulelayo	72
UKUSONDEZELA NOKULUNGISA	74
Ukusondezela nokulungisa: Isivivinyo sangaphambili	75
Ukusondezela nokulungisa: Isifundo sokuqalisa 1 – 4	78
Ukusondezela nokulungisa: Ishadi lomsebenzi 1	85
Ukusondezela nokulungisa: Isifundo sokuqalisa 5 – 7	89
Ukusondezela nokulungisa: Ishadi lomsebenzi 2	93

Ukusondezela nokulungisa: Isifundo sokuqalisa 8	95
Ukusondezela nokulungisa: Isivivinyo esandulelayo	98
UKUHLELA KABUSHA.....	100
Ukuhlela kabusha: Isivivinyo sangaphambili	100
Ukuhlela kabusha: Isifundo sokuqalisa 1 – 4.....	102
Ukuhlela kabusha: Ishadi lomsebenzi 1	111
Ukuhlela kabusha: Isifundo sokuqalisa 5 – 7.....	113
Ukuhlela kabusha: Ishadi lomsebenzi 2	119
Ukuhlela kabusha: Isifundo sokuqalisa 8.....	122
Ukuhlela kabusha: Isivivinyo esandulelayo	123
UKUXHUMANISA UKUHLANGANISA NOKUSUSA	126
Ukuxhumanisa ukuhlanganisa nokususa: Isivivinyo sangaphambili.....	126
Ukuxhumanisa ukuhlanganisa nokususa: Isifundo sokuqalisa 1 – 4.....	128
Ukuxhumanisa ukuhlanganisa nokususa: Ishadi lomsebenzi 1.....	139
Ukuxhumanisa ukuhlanganisa nokususa: Isifundo sokuqalisa 5 – 7	140
Ukuxhumanisa ukuhlanganisa nokususa: Ishadi lomsebenzi 2.....	147
Ukuxhumanisa ukuhlanganisa nokususa: Isifundo sokuqalisa 8.....	149
Ukuxhumanisa ukuhlanganisa nokususa: Isivivinyo esandulelayo.....	151
IMEMORANDAMU	153

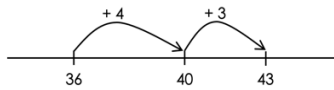
ISINGENISO

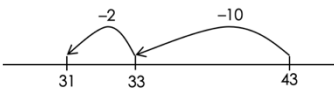
Lomhlahlandlela uqukethe **izibalo zekhanda zokuqalisa ezingama yunithi a-6** zabafundi be Banga le-3. Ingxenye ngayinye ibheka **amasu ahlukene okubala**. Lamasu okubala asuselwa kukharikhulam. Ingxenye ngayinye ihlanganisa iqembu lamakhono acishe afane.

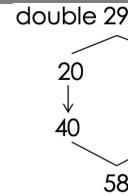
Inhloso ukuqhubeza abafundi ukusuka ekubaleni ngakunye ngeminwe noma ngamamaki ethalisi emaphepheni. Ukubala ngakunye kuchitha isikhathi kanti kugcina ekwenzisaneni amaphutha. Kuphinde kungabi isu elilula ngokukhula noma ukwanda kwezinombolo. Lamasu namakhono kuxhasa ulwazi lwezinombolo olunamandla.

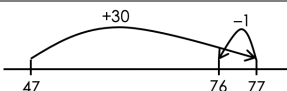
Amasu ayisithupha okubala nesikhathi esibekelwe

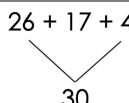
Izingxenye zikalelwe amathemu amathathu okuqala konyaka ngalendlela:

Ithemu 1	Ukuxhumanisa kusetshenziswa ishumi	$36 + 7 =$		$= 43$
----------	------------------------------------	------------	--	--------

Ithemu 1	Amasu okweqa	$43 - 12 =$		$= 31$
----------	--------------	-------------	---	--------

Ithemu 2	Ukuphinda kabili nokuhlukanisa phakathi	ephindiwe a-29 =		$= 58$
----------	---	------------------	--	--------

Ithemu 2	Ukusondezela nokulungisa	$47 + 29 =$		$= 76$
----------	--------------------------	-------------	--	--------

Ithemu 3	Ukuhlela kabusha	$26 + 17 + 4 =$		$= 47$
----------	------------------	-----------------	--	--------

Ithemu 3	Ukuxhumanisa ukuhlanganisa nokususa	$\square - 30 = 9$	<table border="1" style="display: inline-table; vertical-align: middle;"> <tr> <td style="width: 40px; text-align: center;">30</td> <td style="width: 40px; text-align: center;">9</td> </tr> <tr> <td colspan="2" style="height: 20px;"></td> </tr> </table>	30	9			$= 39$
30	9							
		$30 + 9 = \square$						

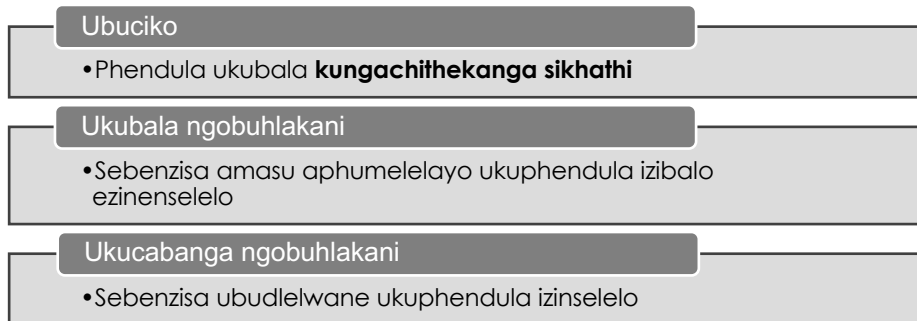
Imodeli

Ingxenywe ngayinye ingamasonto amathathu ilandela le modeli:



Ingxenywe ngayinye iqala ebese igcina ngesivivinyo esifishane sabafundi. Ukumaka lezi zivivinyo kunika abafundi kanye nawe ulwazi mayelana nokuthuthuka kuleyo ngxenywe yolwazi kulawo masonto amathathu.

Engxenyeni ngayinye sibhekana nezinhlalo ezintathu zokubala:



Ukusebenza ngezifundo zokuqalisa engxenyeni ngayinye nekilasi lakho kufanele kubonise intuthuko ekusebenzeni kwabafundi kusukela ezivivinyweni zangaphambili/zokuqala kuye ezivivinyweni ezandulelayo. Lentuthuko ikhombisa inqubekela phambili ezibalweni zekhanda nasekusebenzeni ngezinombolo.

Indlela yokusebenzisa lo mhlahlandlela

Leli bhukwana libalula izivivinyo nezifundo zokuqala engxenyeni ngayinye. Izifundo zokuqalisa zakhiwe ngendlela yokuthi zingene khaxa **kumizuzu eyi-10** yezibalo ezenziwa ngokukhuluma (oral) nezibalo zekhanda ekuqaleni kwesifundo sezibalo.

Isifundo sokuqalisa ngasinye siqala ngomzuzu owodwa wokufudumeza ingqondo kugxilwe kwikhono lokubuyisa okufundiwe masinyane kulolo lwazi lwezombolo. Abafundi kufanele baphendule masishane nangokuzithemba.

Umsebenzi wesifundo sokuqalisa silandela ukufudumezwa kwengqondo. Ukulandelana komsebenzi esifundweni sokuqalisa ngasinye sichaza:

- **ukuthi isu lifundiswa kanjani** (elikhonjiswe ngakwesokunxele) nokuthi
- **kubhalwani** ebhodini (okukhonjiswe ngakwesokudla)

Emuva kwesifundo sokuqalisa ngasinye kunemisebenzi ekufanele yenziwe iqedwe ngumfundi ngamunye. Abafundi kunconywa ukuthi bazame ukuphendula lemisebenzi

ngengqondo besebenzisa amasu abaqeda ukuwafundiswa. Tshela abafundi ukuthi **bangabali ngakunye**. Uma abafundi bebanezinkinga bacele bakubonise ukusebenza kwabo, njengaku mugqa/layini wezinombolo ongenalutho noma ku mdwebo we bha (bar diagram). Umugqa wezinombolo nomdwebo we bha kufanele kube inkomba nje yokusebenza, hhayi umsebenzi wangempela. Inhloso ukusiza/ukuxhasa ukusebenzisa ikhanda ngokusheshayo.

Cela abafundi ukuthi bakuchazele futhi bachazele nabanye **ukucabanga kwabo**. Lokhu kuzokusiza ukubona ukuthi basebenzisa isu ngendlela oyifundisile yini.

Support Videos: Maqondana nepulani lesifundo sokuqalisa ngasinye kune link ekuyisa ku vidiyo ebonisa ukuthi asebenza kanjani amasu. Ungavula i *link* ngoku:

- Ukubeka ikhamera kamakhalekhukhwini wakho esikweleni i QR code noma
- Uthayiphe i *youtu.be link* ku *web browser yakho*

Ngemuva kwesifundo sokuqalisa se-4 nesifundo sokuqalisa se-7, **kunamashadi okusebenza omfundi ngamunye** bangawasebenzisa ukuzama emakhaya.

Imemorandamu yezivivinyo zangaphambili (pre-tests) nezivivinyo ezandulelayo (posttests) zinikeziwe ekugcineni kwalo mhlahlandlela.

Ibhuku lakwa Print Masters

Kunebhukwana elizimele lakwa **PRINT MASTERS** eline:

- zonke izivivinyo zokuqala/zangaphambili kanye nezivivinyo ezandulelayo
- wonke amashadi omsebenzi wasekhaya
- zonke izinsizakufundisa eziphrintekayo

UKUXHUMANISA KUSETSHENZISWA ISHUMI

Isingeniso

Okuqondwe ezifundweni zokuqalisa ezine eziqalisa izifundo ukuhlanganisa kuxhyaniswa kusetshenziswa inombolo ishumi. Bese kuthi iziqalisi zezifundo kwezine ezilandela lapho kube ezokususa kuxhyaniswa kusetshenziswa inombolo ishumi. Eminye imisebenzi iholwa nguthisha ebhodini kanti eminye eyabafundi ukuthi bayenze bengabodwana.

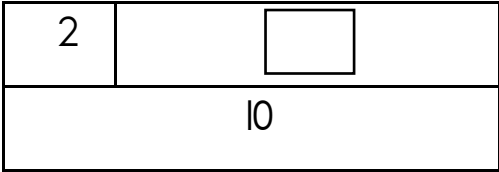
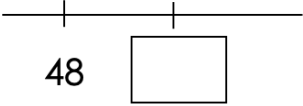
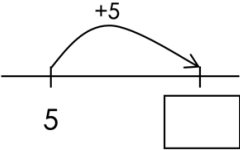
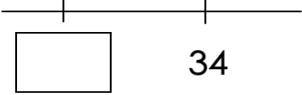
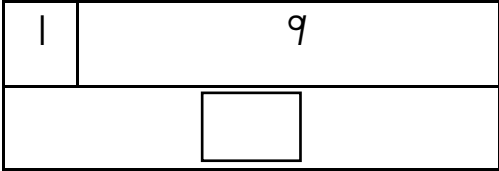
Amakhono okukhumbula ngokushesha

Kunamakhono ayisithupha okukhumbula ngokushesha adingwa abafundi ukuxhumanisa kusetshenziswa inombolo ishumi:

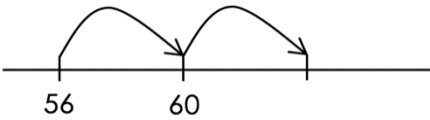
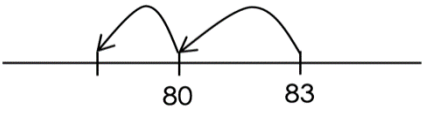
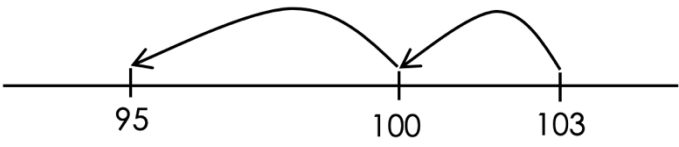
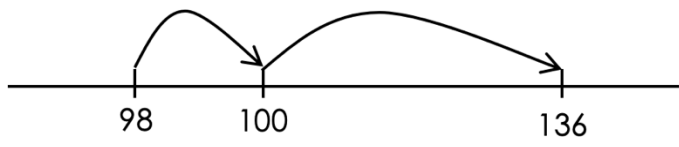
- amabhondi kuya ku-10 nokubala uphindaphinda ngokwe-10 (isib. $7 + \square = 10$; $12 + \square = 20$)
- ukuhlanganisa ku siphindaphindi seshumi (isib. $60 + 3 = 63$)
- ukususa kusiphindaphindi seshumi (isib. $60 - 2 = 58$)
- ukweqa noma ukugxuma kuya kusiphindaphindi seshumi **esilandelayo** emuva kwenombolo (isib. $32 \rightarrow 40$)
- ukweqa noma ukugxuma kuya kusiphindaphindi seshumi **ngaphambili** kwenombolo (isib. $56 \rightarrow 50$)
- ukuguqula ukuhleleka kokubala (isib. $7 +$ yini ishumi? Yini oyihlanganisa ne-7 eyishumi?)

Igama:

Ukuxhumanisa kusetshenziswa ishumi: Isivivinyo sangaphambili
INGXENYE I Imizuzu e-2 kuleli khasi

1. $7 + 3 = \square$	11. $50 + 6 = \square$
2. $2 + 8 = \square$	12. $3 + 60 = \square$
3. $10 = 7 + \square$	13. $40 - 7 = \square$
4. I-8 ngaphansi kwe-10 yi \square	14. $40 + 8 = \square$
5. 	5. Ikuphi ukubala ngokuphindaphinda nge-10 okulandelayo? 
6. 	16. $100 + 27 = \square$
7. $10 - 5 = \square$	7. Ikuphi ukubala ngokuphindaphinda nge-10 ngaphambi kwa-34? 
8. $10 - 4 = \square$	8. $\square + 7 = 50$
9. 	9. $30 - \square = 27$
10. $\square + 10 = 10$	20. $87 = 80 + \square$

Isamba sisuselwa ku-20

Ukuxhumanisa kusetshenziswa ishumi: Isivivinyo sangaphambili INGXYENYE 2 Imizuzu e-3 kuleli khasi	
1. $56 + 8 = \square$	
2. $83 - 4 = \square$	
3. $93 - 7 = \square$	
4. $67 + \square = 73$	
5. $\square + 7 = 82$	
6. $67 + 5 = 67 + 3 + \square$	
7. $94 - \square = 94 - 4 - 2$	
8. $98 + 56 = 98 + 2 + \square$	
9.  $103 - \square = 95$	
10.  $98 + \square = 136$	
Isamba sisuselwa e-10	

**UKUXHUMANISA KUSETSHENZISWA ISHUMI: ISIFUNDO SOKUQALISA 1
Imisebenzi yokufudumeza ingqondo yomzuzu o-1**

I-Pop-Fizz

Uthisha uthi 'pop', abafundi bathi 'fizz'; bese uthisha usho inombolo, abafundi baphendule ngenombolo emeshayo besebenzisa ikhono lokuphendula ngokushesha.

a. Pop-Fizz yenza i-10

Kulendlela abafundi kumele baphendule ngenombolo ezokwenza isibalo sibe yi-10.

- Uthisha: pop → Abafundi: fizz
- Uthisha: 3 → Abafundi: 7
- Uthisha: pop → Abafundi: fizz
- Uthisha: 6 → Abafundi: 4 njalo njalo ...

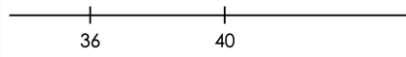
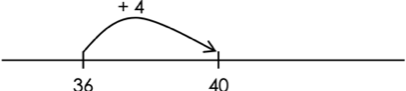
b. Pop-Fizz yenza a-20 (noma okunye ukuphindaphinda kwe-10)

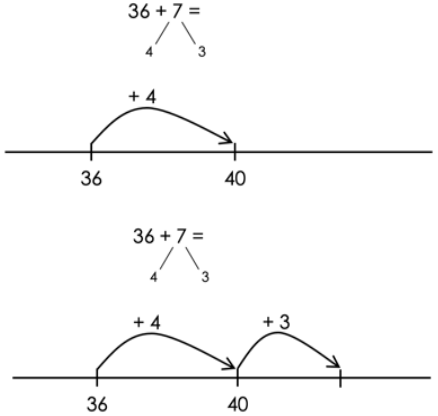
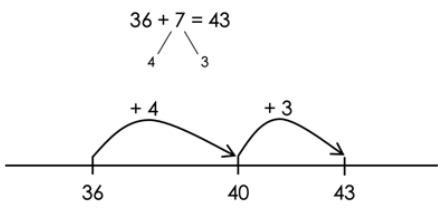
Kulendlela abafundi kumele baphendule ngenombolo ezokwenza isibalo sibe nga-20 (noma iyiphi inombolo ephindaphinda nge-10).

- Uthisha: pop → Abafundi: fizz
- Uthisha: 16 → Abafundi: 4
- Uthisha: pop → Abafundi: fizz
- Uthisha: 11 → Abafundi: 9 njalo njalo ...

Ukulandelana komsebenzi

Kulesi sifundo sisebenzisa isu lokuxhumanisa kusetshenziswa inombolo ishumi ezibalweni zokuhlenganisa.

<p>Isibalo: $36 + 7$ Bhala '$36 + 7 =$' ebhodini. Dweba ulayini ubeke iphoyinti elibhalwe '36'. Uthisha: Siyahlanganisa, ngakho-ke kudingeka sigxume siye phambili. Ikuphi ukubala ngokuphindaphinda nge-10 okulandelayo ngemuva kwa-36? Umfundi kumele eze amake a-40 kulayini.</p>	<p style="text-align: center;">$36 + 7 =$</p> 
<p>Uthisha: Kufanele sigxume siye phambili ka-7 kusukela e-36. Asigxume kanye ukuya kusiphindaphindi seshumi esilandelayo kunokugxuma ngakunye ngakunye. A-36 nani eyenza a-40? Abafundi: 4</p>	<p style="text-align: center;">$36 + 7 =$</p> 

<p>Uthisha: Sihlanganise ngo-4. Sidinga ukuhlanganisa ngoku-7. I-7 sihlukaniseke ngo-4 nani?</p> <p>Abafundi: 3</p> <p>Hlukanisa i- 7 ema-36 + 7 koku-4 noku-3.</p> <p>Uthisha: Sidinga ukuhlanganisa okunye okungaki?</p> <p>Abafundi: 3</p>	
<p>Uthisha: Yini a-40 uwahlanganisa no-3?</p> <p>Abafundi: 43</p> <p>Uthisha: Ngakho, $36 + 7 = 36 + 4 + 3 = 43$</p>	

Umsebenzi womfundi ngamunye

Manje abafundi kufanele bazame lezi zibonelo *ngekhand*:

$48 + 6$ $63 + 8$

Abafundi kufanele bachaze ukucabanga kwabo, isib. “Ngokwa $48 + 6$, ngihlanganisa o-2 ukuthola a-48 ukuthola a-50, bese ngihlanganisa o-4, ngakho-ke impendulo a-54.”

Tshela abafundi ukuthi BANGABALI ngakunye.

Abafundi abanengcindezi ekwenzeni lokhu ngekhand bangadweba eceleni ulayini wezinombolo ukuze ubasize.

Support Video

Ukuxhumanisa kusetshenziswa ishumi 1



https://youtu.be/iJNrdV3P4_s

Support Video

Ukuxhumanisa kusetshenziswa ishumi 2



<https://youtu.be/upvlvkC3Yko>

UKUXHUMANISA KUSETSHENZISWA ISHUMI: ISIFUNDO SOKUQALISA 2

Imisebenzi yokufudumeza ingqondo yomzuzu o-1

a. i-Pop-Fizz: Yenza i-10 bese noma wenze a-20 (noma iyiphi inombolo ephindaphinda ngeshumi)

b. Ukugxumela kunombolo ephindaphinda nge-10 **elandelayo** (isib. 23 → 30; 56 → 60)

Lokhu akusikhona ukusondezelela eshumini kepha ukugxumela enombolweni **elandelayo** ephindaphinda ngokweshumi kulayini wezinombolo.

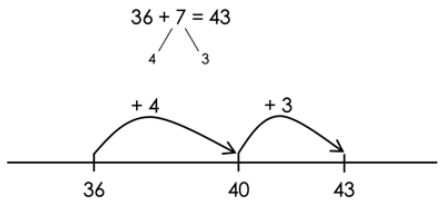
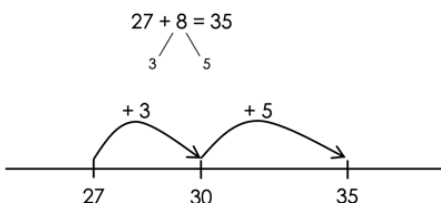
“Iyiphi inombolo **elandelayo** ephindaphinda kashumi **ngemuva ...?**”

Uthisha: 47 → Abafundi: 50

Uthisha: 32 → Abafundi: 40 njalo njalo...

Ukulandelana komsebenzi

Kulesi sifundo sisebenzisa isu lokuxhumanisa kusetshenziswa ishumi ezibalweni zokuhlenganisa.

<p>Buza abafundi ukuthi bakhumbule okwayizolo: Sixazulule kanjani a-$36 + 7$?</p> <p>Qala ngokudweba ulayini wenze iphoyinti '36'.</p> <p>Uthisha: Siyahlanganisa, ngakho-ke kudingeka sigxume siye phambili. Ikuphi ukubala ngokuphindaphinda nge-10 ngemuva kwa-36?</p> <p>Abafundi: 40</p> <p>Umfundi kumele eze amake kulayini.</p> <p>Vumela abafundi bachaze indlela nokuthi isebenza kanjani, nokuthi bayikhombise ebhodini.</p>	<p>Isithombe sokugcina esigcwele siboniswe ngezansi:</p> 
<p>Bese utshengisa ebhodini ukuxhumanisa kusetshenziswa ishumi ukuzazulula: $27 + 8$</p> <p>Qala ngokudweba ulayini bese wenza iphoyinti elibhalwe '27' uxazulule isibalo usebenzisa isu lokuxhumanisa kusetshenziswa ishumi.</p>	<p>Isithombe sokugcina esigcwele siboniswe ngezansi:</p> 

Umsebenzi womfundi ngamunye

Manje abafundi kufanele bazame lezi zibonelo *ngekhandi*: $42 + 9$

Abafundi kufanele bachaze ukucabanga kwabo, isib. “Ngokwa- $42 + 9$, ngihlanganisa i-8 ku-42 ukuze uthole a-50, ebese uhlanganisa o-1 ukuthola a-51”.

Tshela abafundi ukuthi BANGABALI ngakunye ngakunye.

Abafundi abanengcindezi ekwenzeni lokhu ngekhandi bangadweba eceleni ulayini wezinombolo ekutheni ubasize.

Support Video

Ukuxhumanisa kusetshenziswa ishumi 3



https://youtu.be/wDEEqU9B_5Q

UKUXHUMANISA KUSETSHENZISWA ISHUMI: ISIFUNDO SOKUQALISA 3

Imisebenzi yokufudumeza ingqondo yomzuzu o-1

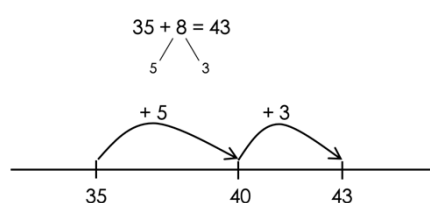
- a. Ukugxumela kunombolo ephindaphinda nge-10 **elandelayo** (isb. 23 → 30; 56 → 60)
 b. Ukuhlanganisela kunombolo ephindaphinda ngeshumi

“Yini a...?”

Uthisha: $30 + 6$ → Abafundi: 36
 Uthisha: $50 + 2$ → Abafundi: 52
 Uthisha: $70 + 5$ → Abafundi: 75 njalo njalo...

Ukulandelana komsebenzi

Kulesi sifundo sisebenzisa isu lokuxhumanisa kusetshenziswa ishumi ezibalweni zokuhlanganisa.

<p>Tshengisa ebhodini ukuxhumanisa kusetshenziswa ishumi ukuxazulula: $35 + 8$</p> <p>Qala ngokudweba ulayini bese wenza iphoyinti elibhalwe '35'.</p> <p>Xazulula isibalo usebenzisa isu lokuxhumanisa kusetshenziswa ishumi.</p>	<p>Isithombe sokugcina esigcwele siboniswe ngezansi:</p> 
---	--

Umsebenzi womfundi ngamunye

Manje abafundi kufanele bazame lezi zibonelo *ngekhandu*:

$$44 + 8 \quad 39 + 7$$

Abafundi kufanele bachaze ukucabanga kwabo, isib. “Ngokwa- $44 + 8$, ngihlanganisa i-6 ku-44 ukuthola a-50, bese ngihlanganisa o-2 ukufikelela ku-52”.

Tshela abafundi ukuthi BANGABALI ngakunye ngakunye.

Nikeza abaqeda masinyane okungaphezulu ukuze bazilolonge/bazijwayeze:

$$43 + 8 \quad 67 + 6 \quad 84 + 7$$

UKUXHUMANISA KUSETSHENZISWA ISHUMI: ISIFUNDO SOKUQALISA 4

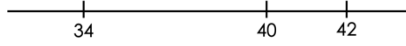
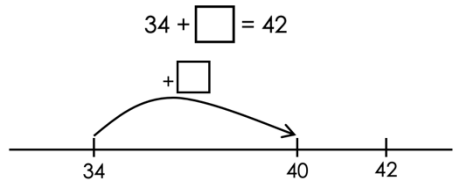
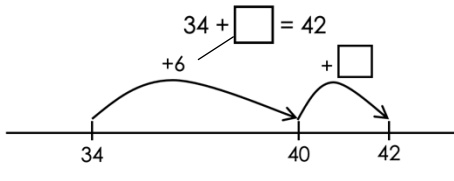
Ukufudumeza ingqondo ngomzuzu o-1

Amabhondi e-10: Imisho yezinombolo kusukela kwi bha dayagramu

<p>Uthisha: Le i bha dayagramu ikhombisa ukuthi i-7 ne-3 senza i-10.</p> <p>Uthisha: I-7 sihlanganiswa nani senza i-10?</p> <p>Abafundi: 3</p> <p>Uthisha: Bese, i-3 sihlanganiswa nani ukwenza i-10?</p> <p>Abafundi: 7</p> <p>Uthisha ukhomba isibalo ngasinye ebhodini ikilasi bese lipha izinombolo ezishiyiwe.</p> <p>Qhubeka ubuze ngomlomo ikilasi, ngezibonelo ezingana usebenzisa ama bhondi eshumi:</p> <p style="padding-left: 20px;">1 + nani osipha i-10? Bese i-9 + nani elisipha i-10?</p> <p style="padding-left: 20px;">2 + nani osipha i-10? Bese i-8 + nani elisipha i-10?</p> <p style="padding-left: 20px;">6 + nani osipha i-10? Bese o-4 + nani okusipha i-10?</p>	<p>Bhala okulandelayo ebhodini:</p> <table border="1" style="margin: 10px auto; border-collapse: collapse;"> <tr> <td style="text-align: center; width: 50px;">7</td> <td style="text-align: center; width: 50px;">3</td> </tr> <tr> <td colspan="2" style="text-align: center; border-top: 1px solid black;">10</td> </tr> </table> <p>Lungiselela ibhodi ngalezi zibonelo:</p> <table style="margin: 10px auto;"> <tr> <td style="border: 1px solid black; padding: 2px;">2</td> <td style="border: 1px solid black; padding: 2px;">8</td> <td style="border: 1px solid black; padding: 2px;">6</td> <td style="border: 1px solid black; padding: 2px;">4</td> </tr> <tr> <td colspan="2" style="text-align: center; border-top: 1px solid black;">10</td> <td colspan="2" style="text-align: center; border-top: 1px solid black;">10</td> </tr> </table> <p>2 + <input style="width: 20px;" type="text"/> = 10</p> <p>8 + <input style="width: 20px;" type="text"/> = 10</p> <p><input style="width: 20px;" type="text"/> + 4 = 10</p> <p>4 + <input style="width: 20px;" type="text"/> = 10</p>	7	3	10		2	8	6	4	10		10	
7	3												
10													
2	8	6	4										
10		10											

Ukulandelana komsebenzi

Kulesi sifundo sisebenzisa isu lokuxhumanisa kusetshenziswa ishumi ukuthola izinombolo ezishiyiwe/ezingekho ezibalweni zokuhlenganisa.

<p>Sebenzisa ukuxhumanisa kusetshenziswa ishumi ukuxazulula a-34 + <input style="width: 20px;" type="text"/> = 42.</p> <p>Dweba ulayini wezinombolo okhombisa '34' no '42'.</p> <p>Uthisha: Ikuphi ukubala okulandelayo ngokuphindaphinda ngeshumi ngemuva kwa-34?</p> <p>Abafundi: 40</p> <p>Maka a-'40' kulayini wezinombolo.</p> <p>Uthisha: 34 nani elingana na-40?</p> <p>Abafundi: 6</p> <p>Bhala '6' ebhulokhini elingaphezulu komgxumo njengoba kukhonjisiwe.</p>	<p style="text-align: center;">$34 + \square = 42$</p>  <p style="text-align: center;">$34 + \square = 42$</p>  <p style="text-align: center;">$34 + \square = 42$</p> 
---	--

Uma abafundi benengcindezi nalesi sibonelo, babuze, “4 + nani eyenza i-10?”

Abafundi kufanele bakwazi ukuphendula bathi ‘6’, ngakho-ke bakhombise ukuthi lokhu kuyafana nazozonke izinombolo eziphindaphinda ngeshumi:

ngakho: $4 + 6 = 10$; $14 + 6 = 20$; $24 + 6 = 30$; $34 + 6 = 40$...

Uthisha: Kuhlangukiswa bani ku-40 ukuthola a-42?

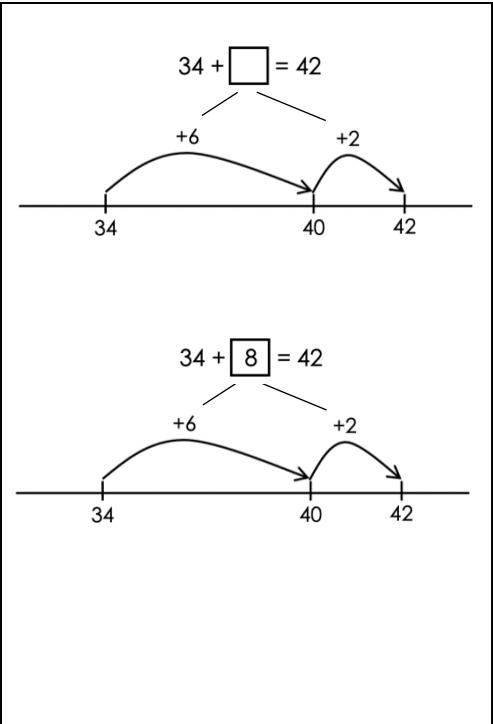
Abafundi: 2

Uthisha: Ubani i-6 sihlangukiswe no-2? (khomba i-6 no-2 emdwebweni)

Abafundi: 8

Uthisha: Ngakho, kuhlangukiswa bani ku-34 ukuthola a-42?

Abafundi: 8



Umsebenzi womfundi ngamunye

Abafundi kufanele bazame lezi zibonelo *ngekhand*:

$28 + \square = 35$ $67 + \square = 72$

Abafundi kufanele bachaze ukucabanga kwabo, isb. “kusibonelo sokuqala, ukubala uphindaphinda ngeshumi okulandelayo a-30, ngakho ngihlangukisa o-2 ukufinyelela e-30 bese kufanele ngihlangukise o-5 ukufinyelela ku-35. O-2 kuhlangukiswa ne-5 yi- 7.”

Tshela abafundi ukuthi BANGABALI ngakunye ngakunye.

Umsebenzi wasekhaya: Ishadi lomsebenzi (Worksheet 1)

Ekupheleni kwesifundo sanamuhla nikeza abafundi ishadi lomsebenzi 1.

Asikho isidingo sokubekela abafundi isikhathi uma benza lomsebenzi. Inhloso ukunikeza abafundi umsebenzi wokuzilolonga noma ukuzijwayeza kumsebenzi ebebewenza ngekhand.

Support Video

Ukuxhumanisa kusetshenziswa ishumi 4



<https://youtu.be/INITWPDMFKY>

Igama:									
Ukuxhumanisa kusetshenziswa ishumu: Ishadi lomsebenzi I									
1. $6 + 4 = \square$	13. $50 + 6 = \square$								
2. $1 + 9 = \square$	14. $50 + 4 = \square$								
3. I-7 ngaphansi kwe-10 \square	15. I-8 ngaphansi kwa-30 \square								
4. $10 = 3 + \square$	16. $20 = 19 + \square$								
5. <table border="1" style="width: 100%;"><tr><td style="width: 20%; text-align: center;">1</td><td style="width: 80%; text-align: right;">\square</td></tr><tr><td colspan="2" style="text-align: center;">10</td></tr></table>	1	\square	10		17. <table border="1" style="width: 100%;"><tr><td style="width: 20%; text-align: center;">4</td><td style="width: 80%; text-align: right;">\square</td></tr><tr><td colspan="2" style="text-align: center;">30</td></tr></table>	4	\square	30	
1	\square								
10									
4	\square								
30									
6.	18.								
7. $10 - 5 = \square$	19. $60 - 4 = \square$								
8. $10 - 8 = \square$	20. $60 - 7 = \square$								
9. <table border="1" style="width: 100%;"><tr><td style="width: 30%; text-align: center;">3</td><td style="width: 70%; text-align: center;">7</td></tr><tr><td colspan="2" style="text-align: center;">\square</td></tr></table>	3	7	\square		21. <table border="1" style="width: 100%;"><tr><td style="width: 80%; text-align: center;">39</td><td style="width: 20%; text-align: center;">1</td></tr><tr><td colspan="2" style="text-align: center;">\square</td></tr></table>	39	1	\square	
3	7								
\square									
39	1								
\square									
10. $\square + 4 = 10$	22. $\square + 3 = 23$								
11. $8 + \square = 10$	23. $30 + \square = 36$								
12.	24.								

Amanothi kathisha

Lapha ungenza amanothi ngesifundo kanye nokuthi yibaphi abafundi abasadinga ukusizwa ngesu lokuxhumanisa kusetshenziswa ishumi. Ungenza namanothi nganoma iyiphi enye into ofuna ukubhekana nayo/ukuyilungisa esifundweni sokuqalisa esilandelayo.

UKUXHUMANISA KUSETSHENZISWA ISHUMI: ISIFUNDO SOKUQALISA 5

Ukufudumeza ingqondo ngomzuzu o-1

a. Ukugxumela ekuphindaphindeneni ngeshumi ngaphambili

Lokhu akusikhona ukusondezela eshumini kepha ukugxumela enombolweni **ngaphambili** ephindaphinda ngokweshumi kulayini wezinombolo.

“Nginikeze ukuphindaphinda ngeshumi okuza **ngaphambi ...**”

Uthisha: 26 → Abafundi: 20

Uthisha: 53 → Abafundi: 50 njalo njalo...

b. Ukususa ekuphindaphindeneni ngeshumi

“Yini a...?”

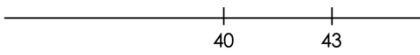
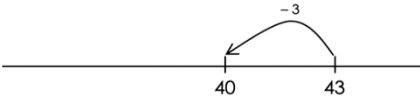
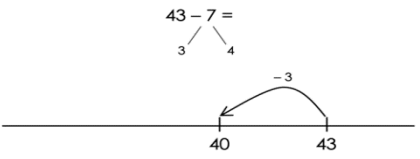
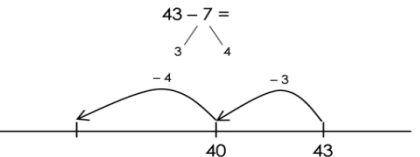
Uthisha: 30 – 6 → Abafundi: 24

Uthisha: 50 – 2 → Abafundi: 48

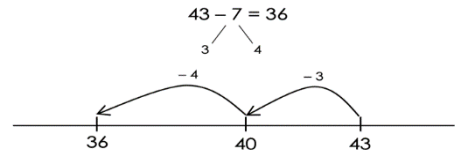
Uthisha: 70 – 5 → Abafundi: 65 njalo njalo ...

Ukulandelana komsebenzi

Kulesi sifundo sisebenzisa isu lokuxhumanisa kusetshenziswa ishumi ukuxazulula izibalo zokususa.

<p>Isibalo: 43 – 7</p> <p>Bhala ‘43 – 7 =’ ebhodini.</p> <p>Dweba ulayini bese wenza iphoyinti elibhalwe ‘43’.</p> <p>Uthisha: Siyasusa, ngakho sidinga ukugxuma siye emuva. Ikuphi ukubala ngokuphindaphinda nge-10 ngaphambi kwa-43?</p> <p>Abafundi: 40</p> <p>Umfundi kumele eze amake kulayini.</p>	<p>43 – 7 =</p> 
<p>Uthisha: Kumele sigxume ka-7 siye emuva. Asigxume kanye siye ekuphindaphindeneni ngeshumi kunokubala siye emuva ngakunye ngakunye. A-43 sisusa bani osipha a-40?</p> <p>Abafundi: 3</p>	<p>43 – 7 =</p> 
<p>Uthisha: Sisuse o-3. Sidinga ukususa okuyisikhombisa. I-7 sihlukaniseka ngo-3 nokungaki?</p> <p>Abafundi: 4</p> <p>Hlukanisa i-7 e- 43 kube o- 3 no-4.</p> <p>Uthisha: Sidinga ukususa okunye okungaki?</p> <p>Abafundi: 4</p>	<p>43 – 7 =</p>  <p>43 – 7 =</p> 
<p>Uthisha: Yini a-40 ususa o-4?</p> <p>Abafundi: 36</p>	

Uthisha: Ngakho, $43 - 7 = 43 - 3 - 4 = 36$.
Qopha isisombululo kulayini wezinombolo.



Umsebenzi womfundi ngamunye

Manje abafundi kufanele bazame lezi zibonelo ezilandelayo *ngekhand*:

$$54 - 6 \quad 63 - 5$$

Abafundi kufanele bazame lezi zibonelo *ngekhand*, isb. “Nga $54 - 6$, ngisusa o-4 ku-54 ukuthola a-50, bese ngisusa o-2, ngakho-ke impendulo a-48.”

Tshela abafundi ukuthi BANGABALI ngakunye ngakunye.

Abafundi abanengcindezi ekwenzeni lokhu *ngekhand* bangadweba ecaleni olayini bezinombolo ekutheni babasize.

Support Video

Ukuxhumanisa kusetshenziswa ishumi 5



<https://youtu.be/-bQNTOPly7I>

Support Video

Ukuxhumanisa kusetshenziswa ishumi 6



<https://youtu.be/JvNKtAdrzfM>

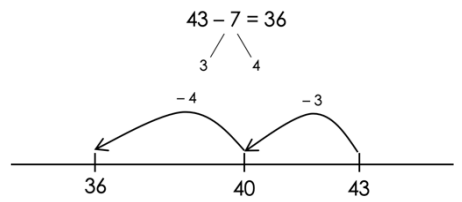
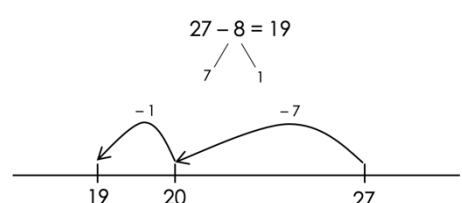
UKUXHUMANISA KUSETSHENZISWA ISHUMI: ISIFUNDO SOKUQALISA 6

Ukufudumeza ingqondo ngomzuzu o-1

- a. Ukugxumela ekuphindaphindeneni ngeshumi **ngaphambili** (isb. $23 \rightarrow 20$; $56 \rightarrow 50$)
- b. Ukususa ekuphindaphindeneni ngeshumi (isb. $30 - 3 \rightarrow 27$; $40 - 6 \rightarrow 34$)

Ukulandelana komsebenzi

Kulesi sifundo sisebenzisa isu lokuxhumanisa kusetshenziswa ishumi ukuxazulula izibalo zokususa.

<p>Buza abafundi ukuthi bazame ukukhumbula okwayizolo: Sixazulule kanjani $a-43 - 7$?</p> <p>Qala ngokudweba ulayini bese wenza iphoyinti elibhalwe '43'.</p> <p>Vumela abafundi bachaze indlela nokuthi isebenza kanjani, nokuthi bayikhombise ebhodini.</p>	<p>Isithombe sokugcina esigcwele siboniswe ngezansi:</p> 
<p>Bese utshengisa ebhodini ukuxhumanisa kusetshenziswa ishumi ukuxazulula: $27 - 8$</p> <p>Qala ngokudweba ulayini bese wenza iphoyinti elibhalwe '27' uxazulule inkinga usebenzisa isu lokuxhumanisa kusetshenziswa ishumi.</p>	<p>Isithombe sokugcina esigcwele siboniswe ngezansi:</p> 

Umsebenzi womfundi ngamunye

Manje abafundi kufanele bazame lezi zibonelo ezilandelayo *ngekhand*a: $35 - 7$

Abafundi kufanele bachaze ukucabanga kwabo, isib. "nga- $35 - 7$, ngenze a- $35 - 5$ ukuthola a- 30 bese ngisusa o- 2 ukuthola a- 28 ."

Tshela abafundi ukuthi BANGABALI ngakunye ngakunye.

Abafundi abanengcindezi ekwenzeni lokhu ngekhand a bangadweba ecaleni olayini bezinombolo ekutheni babasize.

Nikeza abaqeda masinyane okungaphezulu ukuzilolonga/ukuzijwayeza:

$42 - 8$

$62 - 6$

$84 - 7$

Support Video

Ukuxhumanisa kusetshenziswa ishumi 7



https://youtu.be/npm_pVwiXD4

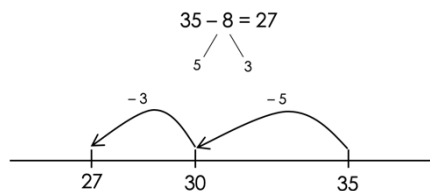
UKUXHUMANISA KUSETSHENZISWA ISHUMI: ISIFUNDO SOKUQALISA 7

Ukufudumeza ingqondo ngomzuzu o-1

- a. Ukugxumela ekuphindaphindeneni ngeshumi **ngaphambili** (isb. $23 \rightarrow 20$; $56 \rightarrow 50$)
- b. Ukususa ekuphindaphindeneni ngeshumi (isb. $30 - 3 \rightarrow 27$; $40 - 6 \rightarrow 34$)

Ukulandelana komsebenzi

Kulesi sifundo sisebenzisa isu lokuxhumanisa kusetshenziswa ishumi ukuxazulula izibalo zokususa.

<p>Tshengisa ebhodini ukuxhumanisa kusetshenziswa ishumi ukuxazulula: $35 - 8$</p> <p>Qala ngokudweba ulayini bese wenza iphoyinti elibhalwe '35'.</p> <p>Xazulula inkinga usebenzisa isu lokuxhumanisa kusetshenziswa ishumi.</p>	<p>Isithombe sokugcina esigcwele siboniswe ngezansi:</p> 
---	---

Umsebenzi womfundi ngamunye

Manje abafundi kufanele bazame lezi zibonelo ezilandelayo *ngekhand*:

$25 - 8$ $36 - 7$

Abafundi kufanele bachaze ukucabanga kwabo, isib. “nga- $25 - 8$, ngenze a- $25 - 5$ ukuthola a- 20 ngabe sengisusa o- 3 ukuthola i- 17 .”

Tshela abafundi ukuthi BANGABALI ngakunye ngakunye.

Abafundi abanengcindezi ekwenzeni lokhu ngekhand bangadweba ecaleni olayini bezinombolo ekutheni babasize.

Nikeza abaqeda masinyane okungaphezulu ukuzilolonga/ukuzijwayeza:

$73 - 6$ $142 - 8$ $81 - 4$

Umsebenzi wasekhaya: Ishadi lomsebenzi 2

Ekupheleni kwesifundo sanamuhla nikeza abafundi ishadi lomsebenzi 2.

Asikho isidingo sokubekela abafundi isikhathi uma benza lomsebenzi. Inhloso ukunikeza abafundi umsebenzi wokuzilolonga noma ukuzijwayeza kumsebenzi ebebewenza ngekhand.

Igama:

Ukuxhumanisa kusetshenziswa ishumi: Ishadi lomsebenzi 2

1. $45 + 8 = \square$



2. $54 - 6 = \square$



3. $26 + \square = 34$

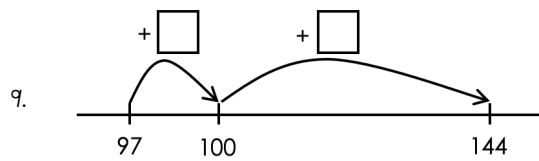
4. $27 + \square = 27 + 3 + 5$

5. $32 + 9 = 32 + 8 + \square$

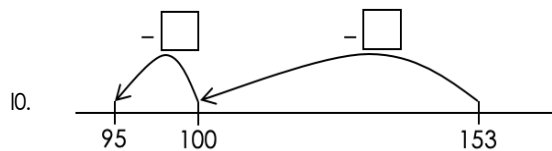
6. $67 + 6 = 67 + 3 + \square$

7. $44 + \square = 44 + 6 + 23$

8. $32 - \square = 32 - 2 - 5$



$97 + \square + \square = 144$



$153 - \square - \square = 95$

Amanothi kathisha

Lapha ungenza amanothi ngesifundo kanye nokuthi yibaphi abafundi abasadinga ukusizwa ngesu lokuxhumanisa kusetshenziswa ishumi. Ungenza namanothi nganoma iyiphi enye into ofuna ukubhekana nayo/ukuyilungisa esifundweni sokuqalisa esilandelayo.

UKUXHUMANISA KUSETSHENZISWA ISHUMI: ISIFUNDO SOKUQALISA 8

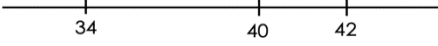
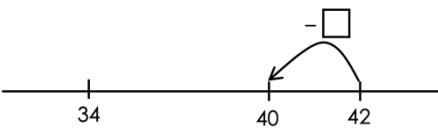
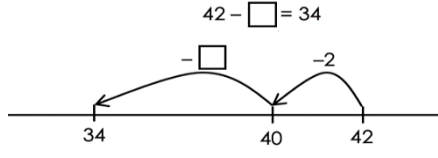
Ukufudumeza ingqondo ngomzuzu o-1

Amabhondi e-10: Imisho yezinombolo kusukela kwi bha dayagramu

<p>Uthisha: Le i bha dayagramu ikhombisa ukuthi i-7 ne-3 senza i-10.</p> <p>Siyakwazi ukubona ukuthi $i-10 - 7 = 3$ uma sibuka umdwebo.</p> <p>Uthisha: Ngakhoke i-10 ususa bani okwenza 3?</p> <p>Abafundi: 7</p> <p>Lungiselela ibhodi ngalezi zibonelo:</p> <p>Bese, i-10 ususa bani okwenza 7?</p> <p>Abafundi: 3</p> <p>Uthisha ukhomba isibalo ngasinye ebhodini bese ikilasi linikeze izinombolo ezishiyiwe/ezingekho.</p> <p>Qhubeka ukubuza izibonelo ezingaphezulu ikilasi ngomlomo usebenzisa amabhondi eshumi:</p> <p>10 ususa bani okwenza 1? 10 ususa bani okwenza 9?</p> <p>10 ususa bani okwenza 2? 10 ususa bani okwenza 8?</p> <p>10 ususa bani okwenza 4? 10 ususa bani okwenza 6?</p>	<p>Bhala okulandelayo ebhodini:</p> <table border="1" style="margin: 10px auto; border-collapse: collapse;"> <tr> <td style="text-align: center; width: 50px;">7</td> <td style="text-align: center; width: 50px;">3</td> </tr> <tr> <td colspan="2" style="text-align: center; border-top: 1px solid black;">10</td> </tr> </table> <p>Lungiselela ibhodi ngalezi zibonelo:</p> <table style="margin: 10px auto;"> <tr> <td style="border: 1px solid black; padding: 2px;">2</td> <td style="border: 1px solid black; padding: 2px;">8</td> <td style="border: 1px solid black; padding: 2px;">6</td> <td style="border: 1px solid black; padding: 2px;">4</td> </tr> <tr> <td colspan="2" style="border: 1px solid black; text-align: center;">10</td> <td colspan="2" style="border: 1px solid black; text-align: center;">10</td> </tr> </table> <p>$10 - \square = 6$</p> <p>$10 - \square = 4$</p> <p>$10 - \square = 2$</p> <p>$10 - \square = 8$</p>	7	3	10		2	8	6	4	10		10	
7	3												
10													
2	8	6	4										
10		10											

Ukulandelana komsebenzi

Kulesi sifundo sisebenzisa isu lokuxhumanisa kusetshenziswa ishumi ukuthola izinombolo ezishiyiwe/ezingekho ezibalweni zokususa.

<p>Sebenzisa ukuxhumanisa kusetshenziswa ishumi ukuxazulula: $42 - \square = 34$</p> <p>Dweba ulayini wezinombolo okhombisa a- '42' na- '34'.</p> <p>Uthisha: Ikuphi ukuphindaphinda ngeshumi ngaphambi kwa-42?</p> <p>Abafundi: 40</p> <p>Maka '40' kulayini wezinombolo.</p> <p>Uthisha: 42 ususa bani okwenza 40?</p> <p>Abafundi: 2</p> <p>Bhala '2' ebhulokini elingaphezu komgxumo.</p> <p>Uthisha: Sithatha okungaki e-40 ukuthola a-34?</p> <p>Abafundi: 6</p>	<p style="text-align: center;">$42 - \square = 34$</p>  <p style="text-align: center;">$42 - \square = 34$</p>  <p style="text-align: center;">$42 - \square = 34$</p> 
---	--

Uma abafundi benengcindezi ngalesi sibonelo, babuze, i-“10 ususa bani okwenza o-4?”

Abafundi kufanele bakwazi ukuphendula bathi ‘6’, ngakhoke bakhombise ukuthi lokhu kuyafana kuziphindaphindi ngeshumi;

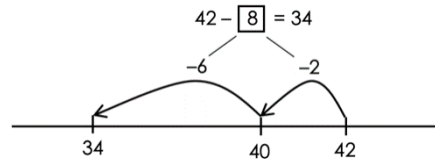
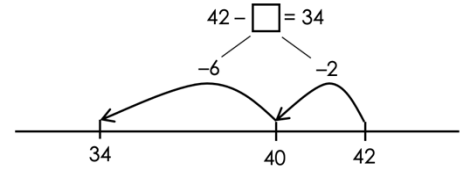
Ngakho: $10 - 6 = 4$; $20 - 6 + 14$; $30 - 6 = 24$; $40 - 6 = 34$ njalo njalo.

Uthisha: Yini i-6 sihlanganiswa no-2? (khomba i-6 no-2 emdwebweni)

Abafundi: 8

Uthisha: Ngakho, 42 ususa bani owenza a-34?

Abafundi: 8



Umsebenzi womfundi ngamunye

Manje abafundi kufanele bazame lezi zibonelo ezilandelayo ngekhandla:

$$35 - \square = 28 \quad 72 - \square = 67$$

Abafundi kufanele bachaze ukucabanga kwabo, isb. “nga-35 $\square = 28$, isiphindaphindi ngeshumi ngaphambi kwa-35 nga-30, ngakho ngisusa o-5 ukuthola a-30 bese ngisusa 2 ukuthola a-28. 5 ehlanganiswa no-2 i-7.”

Tshela abafundi ukuthi BANGABALI ngakunye ngakunye.

Abafundi abanengcindezi ekwenzeni lokhu ngekhandla bangadweba ecaleni olayini bezinombolo ekutheni babasize.

Support Video

Ukuxhumanisa kusetshenziswa ishumi 8



<https://youtu.be/9YSloijDOso>

Igama:

Ukuxhumanisa kusetshenziswa ishumi: Isivinyo esandulelayo

INGXENYE I

Imizuzu e-2 kuleli khasi

1. $6 + 4 = \square$	11. $50 + 7 = \square$															
2. $2 + 8 = \square$	12. $3 + 60 = \square$															
3. $10 = 7 + \square$	13. $40 - 7 = \square$															
4. I-8 ngaphansi kwe-10 yi \square	14. $40 + 8 = \square$															
<p>5.</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td style="padding: 5px;">2</td> <td style="padding: 5px;">\square</td> </tr> <tr> <td colspan="2" style="text-align: center; padding: 5px;">10</td> </tr> </table>	2	\square	10		<p>5. Ikuphi ukubala ngokuphindaphinda nge-10 okulandelayo?</p> <p>5.</p> <table style="margin-left: auto; margin-right: auto;"> <tr> <td style="text-align: center;"> </td> <td style="text-align: center;"> </td> </tr> <tr> <td colspan="2" style="text-align: center;">-----</td> </tr> <tr> <td style="text-align: center;">48</td> <td style="text-align: center;">\square</td> </tr> </table>			-----		48	\square					
2	\square															
10																

48	\square															
<p>6.</p> <table style="margin-left: auto; margin-right: auto;"> <tr> <td style="text-align: center;">5</td> <td style="text-align: center;"> </td> <td style="text-align: center;"> </td> </tr> <tr> <td></td> <td colspan="2" style="text-align: center;">+5</td> </tr> <tr> <td></td> <td colspan="2" style="text-align: center;">-----</td> </tr> <tr> <td></td> <td style="text-align: center;"> </td> <td style="text-align: center;"> </td> </tr> <tr> <td></td> <td style="text-align: center;">5</td> <td style="text-align: center;">\square</td> </tr> </table>	5				+5			-----						5	\square	16. $100 + 27 = \square$
5																
	+5															

	5	\square														
<p>7.</p> $10 - 5 = \square$	<p>7. Ikuphi ukubala ngokuphindaphinda nge-10 ngaphambi kwa-34?</p> <p>7.</p> <table style="margin-left: auto; margin-right: auto;"> <tr> <td style="text-align: center;"> </td> <td style="text-align: center;"> </td> </tr> <tr> <td colspan="2" style="text-align: center;">-----</td> </tr> <tr> <td style="text-align: center;">\square</td> <td style="text-align: center;">34</td> </tr> </table>			-----		\square	34									

\square	34															
8. $10 - 3 = \square$	18. $\square + 8 = 50$															
<p>9.</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td style="padding: 5px;">1</td> <td style="padding: 5px;">9</td> </tr> <tr> <td style="padding: 5px;">\square</td> <td style="padding: 5px;">\square</td> </tr> </table>	1	9	\square	\square	19. $30 - \square = 27$											
1	9															
\square	\square															
10. $\square + 10 = 10$	20. $87 = 80 + \square$															

Isamba sisuselwa ku-20

Ukuxhumanisa kusetshenziswa ishumi: Isivivinyo esandulelayo
 INGXYENYE 2 Imizuzu e-3 kuleli khasi

1. $66 + 8 = \square$

2. $83 - 5 = \square$

3. $93 - 7 = \square$

4. $67 + \square = 73$

5. $\square + 7 = 82$

6. $67 + 5 = 67 + 3 + \square$

7. $94 - \square = 94 - 4 - 2$

8. $98 + 56 = 98 + 2 + \square$

9.

$103 - \square = 95$

10.

$98 + \square = 136$

Isamba sisuselwa e-10

AMASU OKWEQA

Isingeniso

Okuqondwe ezifundweni zokuqala ezine zokuqalisa ukuhlanganisa kusetshenziswa ukuxhumanisa kusetshenziswa inombolo ishumi. Ezifundweni ezine ezilandelayo zokuqalisa kugxilwa ekususeni kusetshenziswa amasu okweqa/ukugxuma. Eminye imisebenzi iholwa nguthisha ebhodini kanti eminye eyabafundi ukuthi bayenze bengabodwana.

Amakhono okukhumbula ngokushesha

Kunamakhono ayisithupha okukhumbula ngokushesha okufanele abafundi bawazi/bawafunde ukwazi amasu okweqa:


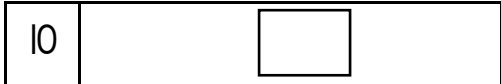

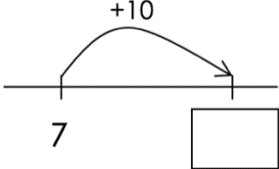
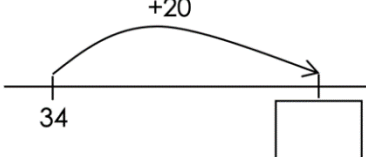
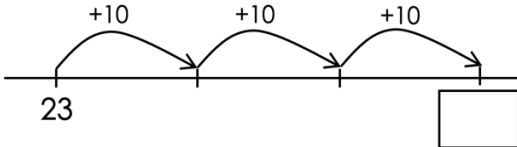
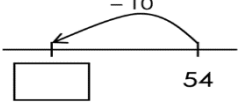
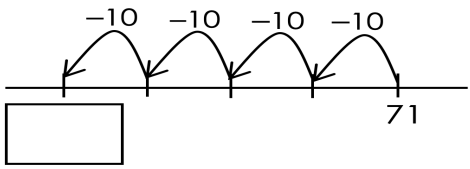
- bala uqhubeke noma ubuyele emuva ngama shumi kusukela kunoma iyiphi inombolo (isb. 12, 22, 32, noma 57, 47, 37, ...)
- hlanganisa noma susa okuyishumi kusukela kunoma iyiphi inombolo noma ususe ishumi kunoma iyiphi inombolo (isb. $43 + 10 = 53$ or $89 - 10 = 79$)
- hlanganisa isiphindaphindi ngeshumi kunoma iyiphi inombolo (isb. $61 + 20 = 81$)
- susa isiphindaphindi ngeshumi kunoma iyiphi inombolo (e.g. $46 - 30 = 16$)
- ukugxumela kusiphindaphindi ngeshumi esilandelayo ngemuva kwenombolo (isb. $32 \rightarrow 40$)
- ukweqela kusiphindaphindi ngeshumi ngaphambi kwenombolo (isb. $56 \rightarrow 50$)

Igama:

Amasu okweqa: Isivinyo sangaphambili

INGXENYE I

Imizuzu e-2 kuleli khasi

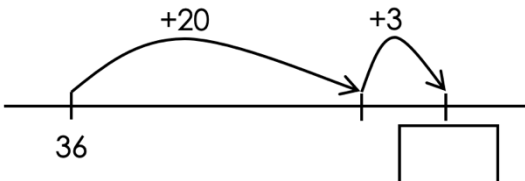
<p>1. Gcwalisa inombolo eshiyiwe. 14, 24, 34, 44, <input type="text"/></p>	<p>1. Yisiphi isiphindaphindi nge-10 esilandelayo?</p>
<p>2. Gcwalisa inombolo eshiyiwe. 79, 69, 59, 49, <input type="text"/></p>	<p>ii. </p>
<p>3. $6 + 30 =$ <input type="text"/></p>	<p>2. </p>
<p>4. $57 - 10 =$ <input type="text"/></p>	<p></p>
<p>5. </p>	<p>3. </p>
<p>6. </p>	<p>4. $16 + 30 =$ <input type="text"/></p> <p>5. Yisiphi isiphindaphindi nge-10 ngaphambi kwa-48?</p>
<p>7. </p>	<p>6. $79 - 40 =$ <input type="text"/></p>
<p>8. $36 +$ <input type="text"/> $= 40$</p>	<p>7. $38 -$ <input type="text"/> $= 18$</p>
<p>9. </p>	<p>8. <input type="text"/> $- 20 = 69$</p> <p>9. $37 +$ <input type="text"/> $= 77$</p>
<p>10. $31 - 20 =$ <input type="text"/></p>	<p>20. <input type="text"/> $+ 20 = 66$</p>

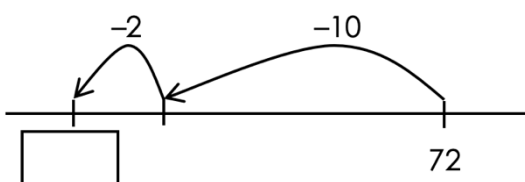
Isamba sisuselwa ku-20

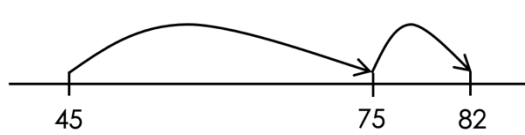
Amasu okweqa: Isivivinyo sangaphambili

INGXENYE 2


Imizuzu e-3 kuleli khasi

1. 

2. 

3. 

$45 + \square + 7 = 82$

4. 

$53 - \square - 4 = 29$

5. $57 + 26 = \square$

6. $83 - 24 = \square$

7. $19 + \square = 41$

8. $62 - \square = 47$

9. $61 - 32 = 61 - \square - 2$

10. $74 - \square = 74 - 20 - 5$

Isamba sisuselwa e-10

AMASU OKWEQA: ISIFUNDO SOKUQALISA 1

Ukufudumeza ingqondo ngomzuzu o-1

a. Jikeleza igumbi ka-10 ngaphezulu (kungadedelwana ekilasini ngezimpendulo)

Uthisha usho inombolo bese abafundi bephendula jikeleza igumbi ka-10 ngaphezulu kunenombolo ebekugcinwe ngayo.

Uthisha: 16

Umfundi 1: 26 → Umfundi 2: 36 → Umfundi 3: 46 → Umfundi 4: 56 kuqhubekwa kanjalo.

b. Jikeleza igumbi ka-10 ngaphansi (kungadedelwana ekilasini ngezimpendulo)

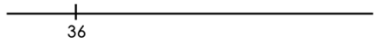
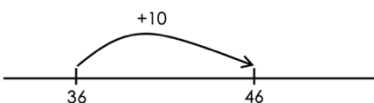
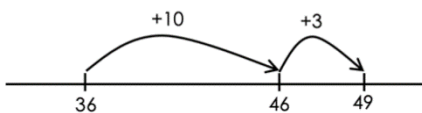
Uthisha usho inombolo bese abafundi bephendula jikeleza igumbi ka-10 ngaphansi kunenombolo ebekugcinwe ngayo.

Uthisha: 128

Umfundi 1: 118 → Umfundi 2: 108 → Umfundi 3: 98 → Umfundi 4: 88 kuqhubekwa kanjalo.

Ukulandelana komsebenzi

Kulesi sifundo sazisa amasu okugxuma ukuxazulula izibalo zokuhlanganisa.

<p>Isibalo: $36 + 13$</p> <p>Bhala '$36 + 13 =$' ebhodini.</p> <p>Qopha a-36 eduzane nasekuqaleni kukalayini (ngoba ukuhlanganisa kusho ukuthi sizobe sigxumela phambili).</p>	<p style="text-align: center;">$36 + 13 =$</p> 
<p>Uthisha: Kufanele sigxumele phambili nge-13. Asihlakaze i-13 kube i-10 ne-3. Yini a-36 + 10?</p> <p>Abafundi: 46</p> <p>Dweba i +10 yomgxumo, uphelela ku-46.</p>	<p style="text-align: center;">$36 + 13 =$</p> <p style="text-align: center;">10 3</p> <p style="text-align: center;">+10</p> 
<p>Uthisha: Kusafanele sigxume ka 3 siye phambili. Yini a-46 sihlanganisa no-3?</p> <p>Abafundi: 49</p> <p>Bhala kulayini wezinombolo njengoba kukhonjisiwe.</p> <p>Uthisha: Silandela lezi zinyathelo:</p> <ul style="list-style-type: none"> • Siqopha inombolo yokuqala • Sihlakaze inombolo yesibili esihlanganisa nayo • Seqa amashumi sibuye seqe nemivo • Siphe impendulo 	<p style="text-align: center;">$36 + 13 = 49$</p> <p style="text-align: center;">10 3</p> <p style="text-align: center;">+10 +3</p>  <p style="text-align: center;">$36 + 10 + 3 = 49$</p>

<p>Uthisha: Ngakho a-36 + 13 ayafana na 36 + 10 + 3 = 49 ngoba sihlanganise i-13 ngokuqala sihlanganise i-10, bese sihlanganisa o- 3. Bhala umusho wezinombolo njengoba kukhonjisiwe.</p>	
---	--

Umsebenzi womfundi ngamunye

Manje abafundi kufanele bazame lezi zibonelo ezilandelayo *ngekhand*:

$$64 + 12 \quad 24 + 15$$

Abafundi kufanele bachaze ukucabanga kwabo, isb. “nga-64 + 12, ngihlanganisa i-10 ku-64 ukuthola a-74 bese ngihlanganisa o-2, ngakho impendulo a-76”.

Tshela abafundi ukuthi BANGABALI ngakunye ngakunye.

Abafundi abanengcindezi ekwenzeni lokhu ngekhand bangadweba ecaleni olayini bezinombolo ekutheni babasize.

Support Video

Amasu okugxuma 1



<https://youtu.be/FPTVoIFFd3k>

AMASU OKWEQA: ISIFUNDO SOKUQALISA 2

Ukufudumeza ingqondo ngomzuzu o-1

I-Pop Fizz: Oku-10 ngaphezulu noma i-10 ngaphansi

a. Uthisha uthi 'pop', abafundi bathi 'fizz'; bese uthisha usho inombolo, abafundi baphendule ngenombolo emeshayo besebenzia ikhono lokuphendula ngokushesha ngaphezulu nge-**10**:

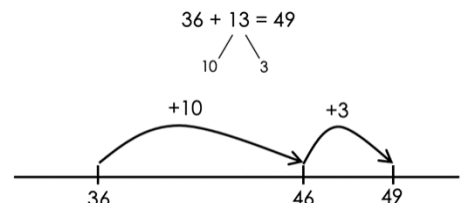
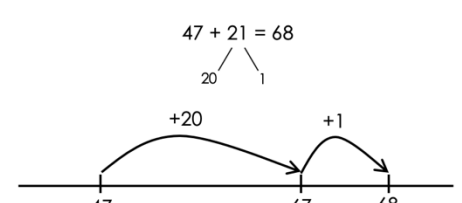
Uthisha: pop	→	Abafundi: fizz	
Uthisha: 3	→	Abafundi: 13	
Uthisha: pop	→	Abafundi: fizz	
Uthisha: 53	→	Abafundi: 63	njalo njalo..

b. Uthisha uthi 'pop', abafundi bathi 'fizz'; Uthisha usho inombolo, abafundi baphendula ngokungaphansi nge-**10** (noma isiphingaphindi se-10 noma ngaphansi):

Uthisha: pop	→	Abafundi: fizz	
Uthisha: 49	→	Abafundi: 39	
Uthisha: pop	→	Abafundi: fizz	
Uthisha: 78	→	Abafundi: 68	njalo njalo..

Ukulandelana komsebenzi

Kulesi sifundo sisebenzisa amasu okweqa/ukugxuma ukuxazulula izibalo zokuhlenganisa.

<p>Buza abafundi bazame ukukhumbula okwayizolo: Siyixazulule kanjani lenkinga $36 + 13$?</p> <p>Qala ngokudweba ulayini uqophe iphoyinti '36'.</p> <p>Vumela abafundi baxoxe ngendlela yokuxazulula nabahlala nabo, cela abangababili bayotshengisa ebhodini.</p> <p>Khumbuza abafundi ngezinyathelo abazifunde ngaphambilini: qopha, hlakaza, yeqa/gxuma bese uyaphendula.</p>	<p>Isithombe sokugcina esigcwele siboniswe ngezansi:</p> 
<p>Bese, utshengisa ebhodini ukusetshenziswa kwamasu okweqa uma uxazulula: $47 + 21$</p> <ul style="list-style-type: none"> • Qopha a- 47 kulayini wezinombolo. • Hlakaza ama- 21 kube a-20 nomuvo o-1 • Yeqa uya phambili ngama-20* bese uphinda weqe ngoku-1*. (Abanye abafundi bazokweqa kabili nge-10 kunokweqa kanye ngama-20. Nalokho kulungile.) • Nikeza impendulo. <p>Uthisha: Ngakho $47 + 21$ uyafana nama $47 + 20 + 1 = 68$</p> <p>Bhala umusho wezinombolo njengoba kukhonjisiwe.</p>	<p>Isithombe sokugcina esigcwele siboniswe ngezansi:</p>  <p style="text-align: center;">$47 + 20 + 1 = 68$</p>

Imisebenzi ezimele

Manje abafundi kumele bazame izibonelo ezilandelayo *ngekhand*:

$$43 + 24 \quad 31 + 25$$

Abafundi kufanele bachaze ukucabanga kwabo, isb. “Ngama $43 + 24$, ngihlanganisa 20 ukuthola 63, bese ngihlanganisa 4, ngakho impendulo ama 67.”

Tshela abafundi ukuthi BANGABALI ngakunye ngakunye.

Support Video

Amasu okweqa 2



<https://youtu.be/6RkP5bSpINQ>

Support Video

Amasu okweqa 3



<https://youtu.be/JAGey218ADw>

AMASU OKWEQA: ISIFUNDO SOKUQALISA 3

Umzuzu o-1 wokufudumeza ingqondo

I-Pop-Fizz: Okuyi-10 ngaphezulu kanye nokuyi-10 ngaphansi; okungama-20 ngaphezulu kanye nokungama-20 ngaphansi.

Ukulandelana komsebenzi

Kulesisifundo, amasu okweqa anwetshelwe ukufaka izinyathelo zokukuxhumanisa kusetshenziswa ishumi.

<p>Tshengisa ebhodini ukuthi lelisu lokweqa lingasetshenziswa kanjani ukuxazulula: $35 + 16$</p> <p>Bhala umusho wezinombolo ebhodini bese udweba ulayini wezinombolo ongenalutho.</p> <ul style="list-style-type: none"> • Qopha u 35 kulayini wezinombolo. • Hlakaza i-16 kube yi-10 ne-6 • Yeqa/gxuma kayi-10 ukuya phambili ukufinyelela ku 45. • Yeqa/gxuma lokhu okuyi-6 okusele ngokuxhumanisa ngesiphindaphindi se-10 esilandelayo (lokhu nga-50). Ngakho okuyi- 6 kufanele kuhlakazwe kanje oku-5 kanye noku-1. • Yeqa/gxuma uya phambili ka-5 na-1. • Nikeza impendulo. <p>Uthisha: Ngakho $35 + 16$ uyafana nama $35 + 10 + 6 = 51$ noma $35 + 10 + 5 + 1 = 51$.</p> <p>Bhala imisho yezinombolo njengoba kukhonjisiwe.</p>	<p>Isithombe sokugcina esigcwele siboniswe ngezansi:</p> <p>$35 + 16 = 51$</p> <p>$35 + 10 + 6 = 51$</p> <p>$35 + 10 + 5 + 1 = 51$</p>
--	---

Imisebenzi yomfundi ngamunye

Manje abafundi kumele bazame izibonelo ezilandelayo *ngekhandu*:

$$39 + 23 \quad 68 + 35$$

Abafundi kufanele bachaze ukucabanga kwabo, isb. “ngama $39 + 23$, ngihlanganisa 20 ku 39 ukuthola 59, bese ngihlanganisa oku-1 ukuthola 60, bese ngihlanganisa oku-2, ngakho impendulo ama-62.”

Tshela abafundi ukuthi BANGABALI ngakunye ngakunye.

Nikeza abafundi abasheshe baqede umsebenzi owengeziwe ukuze bazilolonge:

AMASU OKWEQA: ISIFUNDO SOKUQALISA 4

Umzuzu o-1 wokufudumeza ingqondo

Ukweqelq enombolweni **elandelayo** kubalwa ngamashumi

Lokhu akusikhona ukusondezela kwishumi elilandelayo kepha ukweqela noma ukugxumela kusiphindaphindi ngeshumi **esilandelayo** kulayini wezinombolo.

“Yisiphi isiphindaphindi ngeshumi **esilandelayo ngemuva...?**”

Uthisha: 47 → Abafundi: 50
 Uthisha: 55 → Abafundi: 60
 Uthisha: 32 → Abafundi: 40 njalo njalo...

Ukulandelana komsebenzi

Kulesisifundo, sisebenzisa amasu okweqa ukuxazulula inkinga yezinombolo ezeqiwe.

<p>Khombisa ebhodini ukuthi amasu okweqa asetshenziswa kanjani ukuxazulula ama $23 + \square = 37$ ngalendlela:</p> <p>Bhala umusho wezinombolo ebhodini bese udweba ulayini wezinombolo ongenalutho.</p> <p>Qopha '23' kulayini wezinombolo.</p> <p>Uthisha: Sidinga ukugxuma/ukweqa siya phambili kuma 37.</p> <p>Maka 37 kulayini wezinombolo.</p> <p>Uthisha: Mangaki amashumi esizoweqa, futhi mingaki imivo ezokweqiwa?</p> <p>Abafundi: <i>yeqa okuyi-10</i> ukufinyelela kuma 33 bese weqa oku-4 ukufinyelela kuma 37.</p> <p>Dweba lokhu kweqa kulayini wezinombolo.</p> <p>Uthisha: Seqe kangaki sekukonke?</p> <p>Abafund: 14</p> <p>Bhala i-14 ebhulokhini.</p> <p>Uthisha: Ngakho ama $23 + 10 + 4$ ayafana nokuthi $23 + 14 = 37$.</p>	$23 + \square = 37$ $23 + \boxed{14} = 37$
---	---

Imisebenzi yomfundi ngamunye

Manje abafundi kumele bazame izibonelo ezilandelayo *ngekhanda*:

$$45 + \square = 67 \quad 67 + \square = 81$$

Abafundi mabakhuthazwe ukuchaza abakucabangayo, isb. “ngama $45 + \square = 67$, ngihlanganisa ama-20 ku-45 ukuthola a-65, bese ngihlanganisa o-2 ukuthola ama-67, ngakho okweqiwe sekukonke ngama- 22.”

Tshela abafundi ukuthi BANGABALI ngakunye ngakunye.

Nikeza abafundi abasheshe baqede umsebenzi owengeziwe ukuze bazilolonge:

$$45 + \square = 68$$

$$67 + \square = 83$$

Umsebenzi wasekhaya –Ishadi lokusebenza 1

Ekupheleni kwesifundo sanamhlanje nikeza abafundi ishadi lokusebenza 1.

Asikho isidingo sokubekela abafundi isikhathi uma benza lomsebenzi. Inhloso ukunikeza abafundi umsebenzi wokuzilolonga noma ukuzijwayeza kumsebenzi ebebewenza ngekhandu.

Support Video

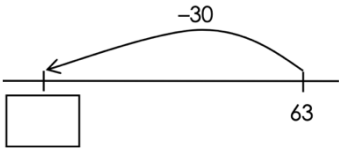
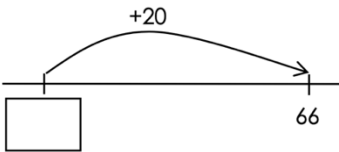
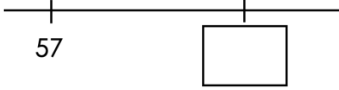
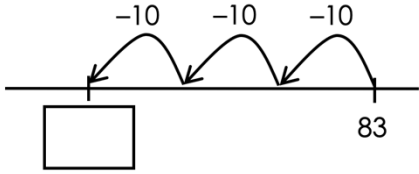
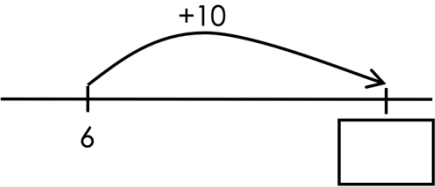
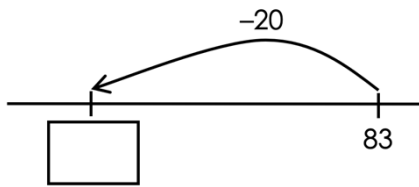
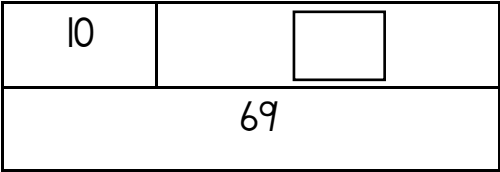
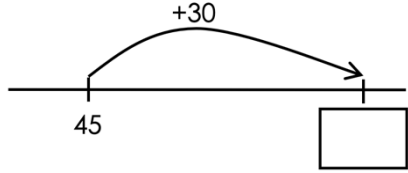
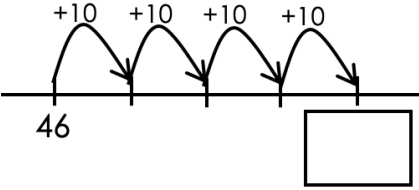

Amasu okweqa 4



<https://youtu.be/A9vFXHWkzUo>

Igama:

Amasu okweqa: Ishadi lomsebenzi I

<p>1. $75 - 10 = \square$</p>	<p>11. $14 + 50 = \square$</p>
<p>2. </p>	<p>12. </p>
<p>3. 17 27 37 \square 57</p>	<p>13. 86 76 66 56 \square</p>
<p>4. $47 + \square = 50$</p>	<p>14. $68 - \square = 8$</p>
<p>5. Yisiphi isiphindaphindi nge-10 esilandelayo? </p>	<p>15. </p>
<p>6. </p>	<p>16. </p>
<p>7. $52 - 20 = \square$</p>	<p>17. $4 + 50 = \square$</p>
<p>8. </p>	<p>18. </p>
<p>9. </p>	<p>19. Yisiphi isiphindaphindi nge-10 ngaphambi kwa-37? </p>
<p>10. $45 + \square = 85$</p>	<p>20. $97 - 60 = \square$</p>

Amanothi kathisha

Lapha ungenza amanothi ngesifundo kanye nokuthi yibaphi abafundi abasadinga ukusizwa ngesu lokuxhumanisa kusetshenziswa ishumi. Ungenza namanothi nganoma iyiphi enye into ofuna ukubhekana nayo/ukuyilungisa esifundweni sokuqalisa esilandelayo.

Support Video

Amasu okweqa 5



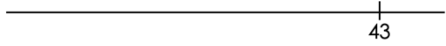
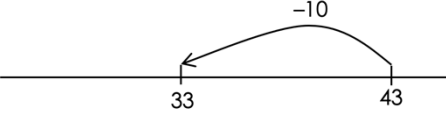
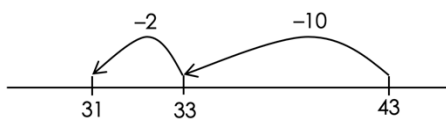
<https://youtu.be/dFV5gmY68Sc>

AMASU OKWEQA: ISIFUNDO SOKUQALISA 5

Umzuzu o-1 wokufudumeza ingqondo

- a. Jikeleza igumbi ka-10 ngaphezulu
- b. Jikeleza igumbi ka-10 ngaphansi

Ukulandelana komsebenzi

<p>Kulesi sifundo sisebenzisa amasu okweqa ukuxazulula izibalo zokususa: $43 - 12$ Bhala '$43 - 12 =$' ebhodini. Qopha '43' eduzane nasekupheleni kukalayini (ngoba ukususa kusho ukuthi sizokweqela/gxumela emuva).</p>	<p style="text-align: center;">$43 - 12 =$</p> 
<p>Uthisha: Kufanele seqe sibuyela emuva ka-12. Asihlakaze i-12 kube i-10 noku-2. Yini ama $43 - 10$? Abafundi: 33 Yenza ukweqa oku-10 uwele/ufike kuma-33.</p>	<p style="text-align: center;">$43 - 12 =$ $\begin{matrix} 10 & 2 \end{matrix}$</p> 
<p>Uthisha: Kusafanele seqe ka-2 sibuyela emuva. Yini ama-33 sisusa oku-2? Abafundi: 31 Bhala kulayini wezinombolo njengoba kutshengisiwe. Uthisha: Sisuse okuyi- 12 ngokususa i-10 nangokususa oku-2.</p> <ul style="list-style-type: none"> • Siqopha inombolo yokuqala • Sihlakaze inombolo yesibili • Seqe amashumi sibuye seqe nemivo (sigxuma siya emuva ngoba siyasusa) • Sinikeze impendulo <p>Uthisha: Ngakho $43 - 12$ uyafana nama $43 - 10 - 2 = 31$. Bhala imisho yezinombolo njengoba kutshengisiwe.</p>	<p style="text-align: center;">$43 - 12 = 31$ $\begin{matrix} 10 & 2 \end{matrix}$</p> 

Imisebenzi yomfundi ngamunye

Abafundi mabakhuthazwe ukwenza lezizinyathelo *ngekhandu*:

$62 - 12$ $53 - 11$

Abafundi kufanele bachaze imicabango yabo, isb, "Ku- $62 - 12$, ngisusa i-10 ku- 62 ukuthola a-52, bese ngisusa o-2, ngakho impendulo nga-50."

Tshela abafundi ukuthi BANGABALI ngakunye ngakunye.

AMASU OKWEQA: ISIFUNDO SOKUQALISA 6

Umzuzu o-1 wokufudumeza ingqondo

a. Hlanganisa i-10 (noma hlanganisa isiphindaphindi nge-10)

Indlela efanayo nokuthi 'okungaphezulu nge-10', kodwa manje uthisha unikeza isibalo 'ezohlenganisa i-10'.

- Uthisha: $16 + 10 \rightarrow$ Abafundi: 26
- Uthisha: $84 + 10 \rightarrow$ Abafundi: 94
- Uthisha: $96 + 10 \rightarrow$ Abafundi: 106 njalo njalo ...

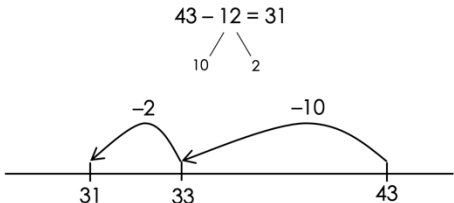
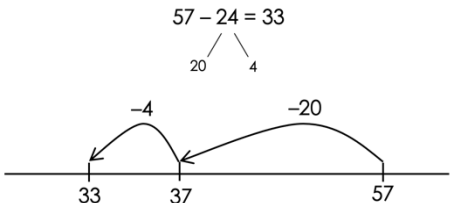
b. Susa i-10 (noma susa isiphindaphindi nge-10)

Indlela efanayo nokuthi 'okungaphansi nge-10', kodwa manje uthisha unikeza isibalo 'ezosusa i-10'.

- Uthisha: $56 - 10 \rightarrow$ Abafundi: 46
- Uthisha: $84 - 10 \rightarrow$ Abafundi: 74
- Uthisha: $95 - 10 \rightarrow$ Abafundi: 85 njalo njalo ...

Ukulandelana komsebenzi

Kulesi Sifundo sisebenzisa amasu okweqa ukuxazulula izibalo zokususa.

<p>Buza abafundi ukuthi abazame ukukhumbula okwayizolo:</p> <p>Siwaxazulule kanjani $43 - 12$?</p> <p>Bavumele abafundi baxoxe ngendlela yokuxazulula nabahlala nabo, cela abangababili bayotshengisa ebhodini. Khumbuza abafundi ngezinyathelo abazifundile: qopha, hlakaza, yeqa/gxuma (uhlehle) bese uyaphendula.</p>	<p>Isithombe sokugcina esigcwele siboniswe ngezansi:</p> 
<p>Tshengisa ebhodini ukuthi axazululwa kanjani a: $57 - 24$</p> <p>Qopha a '57' kulayini wezinombolo.</p> <p>Hlakaza a-24 kube a-20 kanye no-4.</p> <p>Yeqa ubuyela emuva ngama-20* phinda weqe ubuyela emuva ngo-4. * Abanye abafundi bangeqa bebuyela emuva ngama-10 kabili endaweni yokweqa bebuyela emuva kanye ngama-20. Nalokhu kulungile.</p> <p>Bhala impendulo.</p> <p>Uthisha: Ngakho ama $57 - 24$ ayafana na $57 - 20 - 4 = 33$.</p> <p>Bhala umusho wezinombolo njengoba kutshengisiwe.</p>	<p>Isithombe sokugcina esigcwele siboniswe ngezansi:</p> 

Umsebenzi womfundi ngamunye

Manje abafundi kuzofanele bazame izibonelo ezilandelayo *ngekhand*:

95 – 23 43 – 22

Abafundi kufanele bachaze imicabango yabo, isb., “Ngama 95 – 23, ngisusa a-20 ku-95 ukuthola a-75, bese ngisusa o-3, ngakho impendulo nga-72.”

Tshela abafundi ukuthi BANGABALI ngakunye ngakunye.

Abafundi abanengcindezi ekwenzeni lokhu ngekhand bangadweba ecaleni olayini bezinombolo ekutheni babasize.

Support Video

Amasu okweqa 6



<https://youtu.be/JQq2zL6pwCM>

Support Video

Amasu okweqa 7



<https://youtu.be/uFGzuToKGkA>

AMASU OKWEQA: IZIFUNDO ZOKUQALISA 7

Umzuzu o-1 wokufudumeza ingqondo

Ukweqa kubalwa ngama-10 **ngaphambili**

Lokhu akusikhona ukusondezela eshumini eliseduze kodwa ukweqela noma ukugxumela ekubaleni ngeshumi **ngaphambili** kulayini wezinombolo.

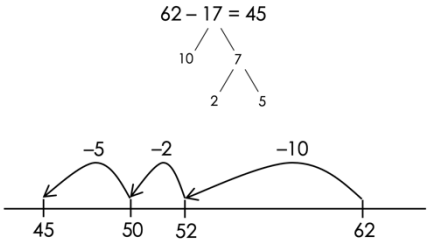
“Nginikeze ukubala ngeshumi okuza **ngaphambili...**”

Uthisha: 26 → Abafundi: 20

Uthisha: 53 → Abafundi: 50 njalo njalo...

Ukulandelana komsebenzi

Kulesi sifundo silula amasu okweqa ukufaka isinyathelo sokuxhumanisa kusetshenziswa ishumi.

<p>Tshengisa ebhodini ukuxhumanisa kusetshenziswa ishumi ukuxazulula: $62 - 17$ Qopha '62' kulayini wezinombolo ongenalutho. Hlakaza i-17 kube i-10 ne-7. Yeqela emuva ka-10 ukufinyelela ku-52. Yeqela emuva ku-7 esisele ngokuxhumanisa usebenzisa ukuphindaphinda ngeshumi ngaphambili (lokhu nga-50). Ngakho isi- 7 sidinga ukuhlakazwa ngo-2 no-5. Yeqela emuva ka-2 naka-5. Bhala impendulo.</p>	<p>Isithombe sokugcina esigcwele siboniswe ngezansi:</p> 
<p>Uthisha: Ngakho $62 - 17$ ufana: $62 - 10 - 7 = 45$ noma $62 - 10 - 2 - 5 = 45$</p>	<p>$62 - 10 - 7 = 45$ $62 - 10 - 2 - 5 = 45$</p>

Umsebenzi womfundi ngamunye

Manje abafundi kuzofanele bazame izibonelo ezilandelayo *ngekhand*:

$75 - 18$ $93 - 14$

Abafundi mabakhuthazwe ukuchaza abakucabangayo, isb. “Ngokwa $75 - 18$, ngisusa i-10 kuma-75 ukuthola a-65, bese ngisusa o-5 ukuthola a-60, bese ngisusa o-3, ngakho impendulo nga-57”.

Tshela abafundi ukuthi BANGABALI ngakunye ngakunye.

Nikeza abafundi abasheshe baqede umsebenzi owengeziwe ukuze bazilongwe:

$73 - 28$ $62 - 35$

Umsebenzi wasekhaya – Ishadi lokusebenza 2

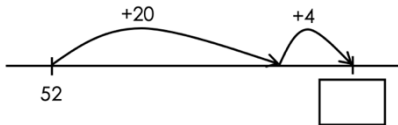
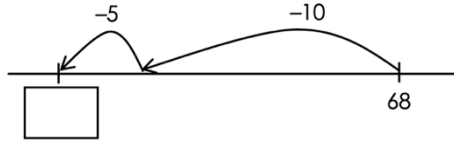


Ekupheleni kwesifundo sanamhlanje nikeza abafundi ishadi lokusebenza 2.

$45 + \square = 68$ $67 + \square = 83$

Asikho isidingo sokubekela abafundi isikhathi uma benza lomsebenzi. Inhloso ukunikeza abafundi umsebenzi wokuzilolonga noma ukuzijwayeza kumsebenzi ebebwenza ngekhand.

Igama:

Amasu okweqa: Ishadi lomsebenzi 2

1.	
2.	$45 + 8 = \square$
3.	$64 - 25 = \square$
4.	
5.	$18 + \square = 42$
6.	$73 - \square = 58$
7.	$53 - 24 = 53 - \square - 4$
8.	 $27 + \square + 6 = 63$
9.	 $72 - \square - 3 = 49$
10.	$86 - \square = 86 - 20 - 9$

Amanothi kathisha

Lapha ungenza amanothi ngesifundo kanye nokuthi yibaphi abafundi abasadinga ukusizwa ngesu lokuxhumanisa kusetshenziswa ishumi. Ungenza namanothi nganoma iyiphi enye into ofuna ukubhekana nayo/ukuyilungisa esifundweni sokuqalisa esilandelayo.

Support Video

Amasu okweqa 8



<https://youtu.be/BHC9jDIUdRI>

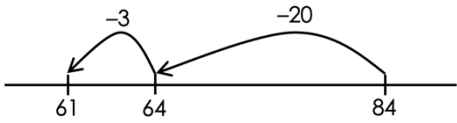

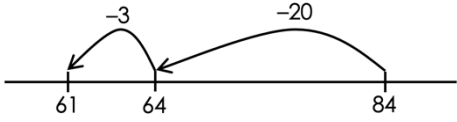
AMASU OKWEQA: IZIFUNDO ZOKUQALISA 8

Umzuzu o-1 wokufudumeza ingqondo

- a. Ukweqa ukuphindaphinda ngeshumi ngaphambili
- b. Susa iziphindaphindi nge-10

Ukulandelana komsebenzi

Kulesi sifundo, amasu okweqa asetshenziselwa ukuxazulula izinkinga zezinombolo ezishiyiwe.

<p>Isibalo: $84 - \square = 61$</p> <p>Qopha '84' kulayini wezinombolo.</p> <p>Uthisha: Sidinga ukweqa sibuyele emuva sifike ku-61.</p> <p>Maka '61' kulayini wezinombolo.</p> <p>Uthisha: Sizokweqa amashumi amangaki sibuye seqe imivo emingaki?</p> <p>Abafundi: Susa a-20 ukuthola a-64 bese ususa o-3 ukufika ku-61</p> <p>Dweba lokhu kweqa emgqeni wezinombolo.</p> <p>Buza: Seqe sibuyela emuva kangaki?</p> <p>Abafundi: 23</p> <p>Bhala impendulo ebhulokhini.</p> <p>Uthisha: Ngakho a- $84 - 20 - 3$ afana na- $84 - 23 = 61$</p> <p>Bhala umusho wezinombolo njengoba kutshengisiwe.</p>	<div style="text-align: center;"> $84 - \square = 61$ </div>  <div style="text-align: center; margin-top: 20px;"> $84 - \boxed{23} = 61$ </div> <div style="text-align: center;">  </div> 
--	---

Imisebenzi yomfundi ngamunye

Manje abafundi kuzofanele bazame izibonelo ezilandelayo *ngekhand*:

$75 - \square = 62$ $93 - \square = 69$

Abafundi kufanele bachaze ukucabanga kwabo, isb. "Ngokwa $75 - \square = 62$, ngisusa i-10 ukuthola a-65, bese ngisusa o-3 ukuthola a-62, ngakhoke ukweqa ubuyela emuva sekukonke yi-13."

Tshela abafundi ukuthi BANGABALI nga-1.

Uma kukhona abafundi abasheshe bayiqede lemisebenzi, banikeze owengeziwe ukuze bazilolonge:

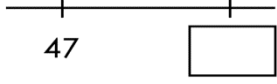

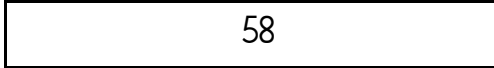
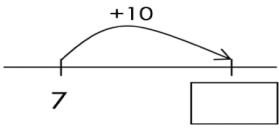
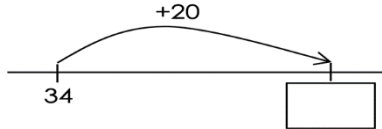
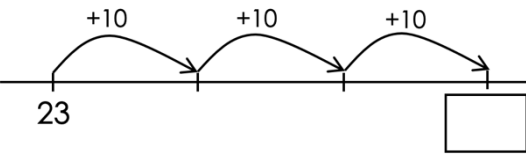
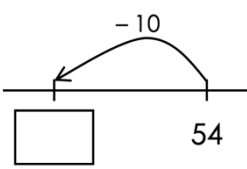
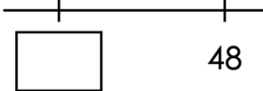
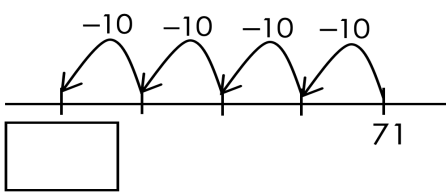
$75 - \square = 63$ $94 - \square = 69$

Igama:

Amasu okweqa: Isivinyo esandulelayo

INGXENYE I

Imizuzu e-2 kuleli khasi

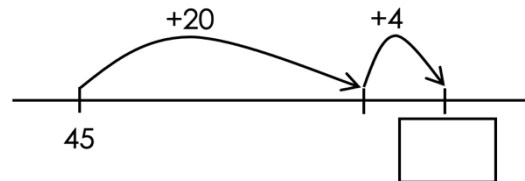
<p>1. Gcwalisa inombolo eshiyiwe. 12, 22, 32, 42, <input type="text"/></p>	<p>1. Yikuphi ukubala ngokuphindaphinda nge-10 okulandelayo?</p>
<p>2. Gcwalisa inombolo eshiyiwe. 79, 69, 59, 49, <input type="text"/></p>	
<p>3. $6 + 30 =$ <input type="text"/></p>	<p>2. </p>
<p>4. $57 - 10 =$ <input type="text"/></p>	
<p>5. </p>	<p>3. </p>
<p>6. </p>	<p>4. $16 + 30 =$ <input type="text"/></p>
<p>7. </p>	<p>5. Yikuphi ukubala ngokuphindaphinda nge-10 ngaphambi kwa-48?</p> 
<p>8. $37 +$ <input type="text"/> $= 40$</p>	<p>6. $79 - 40 =$ <input type="text"/></p>
<p>9. </p>	<p>7. $38 -$ <input type="text"/> $= 18$</p>
<p>10. $31 - 20 =$ <input type="text"/></p>	<p>8. <input type="text"/> $- 20 = 64$</p> <p>9. $37 +$ <input type="text"/> $= 77$</p> <p>10. <input type="text"/> $+ 20 = 66$</p>

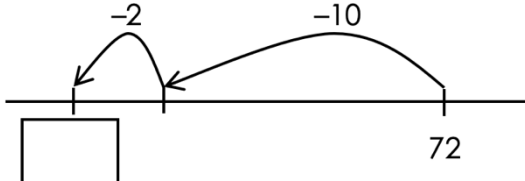
Isamba sisuselwa ku-20


Amasu okweqa: Isivivnyo esandulelayo


INGXENYE 2

Imizuzu e-3 kuleli khasi

1. 

2. 

3. 
 $45 + \square + 7 = 82$

4. 
 $53 - \square - 4 = 29$

5. $57 + 26 = \square$

6. $83 - 24 = \square$

7. $19 + \square = 41$

8. $52 - \square = 37$

9. $61 - 32 = 61 - \square - 2$

10. $74 - \square = 74 - 20 - 5$

Isamba sisuselwa e-10

UKUPHINDA KABILI NOKUHLUKANISA PHAKATHI

Isingeniso

Injongo ezifundweni zokuqala ezintathu ukukhumbula ukuphinda kabili kuze kufike ekuphindeneni kabili i-10 kanye nokuhlukanisa kabili izinombolo ezibizwa ngama even numbers ukufika ku-20. Sixhumanisa lokhu kukhumbula nolimi nokukhonjiswa okubalulekile kokuphinda kabili/ukuhlukanisa phakathi. Ezifundweni ezinhlanu zokuqalisa ezilandelayo, injongo ukusebenzisa lokhu kukhumbula ukuze kusetshenziswe ikhanda ukwenza ukuphinda kabili nokuhlukanisa phakathi ngokulinganayo izinombolo ezinkudlwana. Eminye imisebenzi iholwa uthisha ebhodini kanti eminye eyabafundi ukuthi bayenze ngabodwana.

Amakhono okukhumbula ngokushesha

Mathathu amakhono okukhumbula ngokuphazima kweso adingwa abafundi ukuze bakwazi ukuphinda kabili kanye nokuhlukanisa phakathi ngokulinganayo:

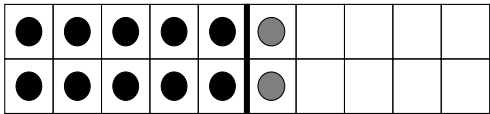
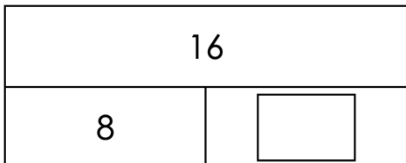
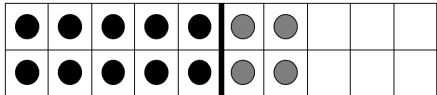
- Ukuphinda kabili kuya ekuphindeneni kabili i-10 (isb. o-4 kuphindeke kabili yi-14);
- Ukuhlukanisa kabili izinombolo ezibizwa ngama even numbers ukufika ku-20 (isb. uhhafu we-6 o-3 noma uhhafu we-18 yi-9).
- Ukuphinda kabili nokuhlukanisa phakathi izinombolo ezilula/okusebenzeka kalula ngazo (isb. A-30 ephindwe kabili nga-60 noma uhhafu wa-50 nga-25 noma a-200 ephindwe kabili nga-400).

Igama:

Ukuphinda kabili nokuhlukanisa phakathi: Isivinyo sangaphambili

INGXENYE I

Imizuzu e-2 kuleli khasi

<p>1. </p> <p>$6 + 6 = \square$</p>	<p>11. $15 + 15 = \square$</p>
<p>2. uhhafu we-12 = <input type="text"/></p>	<p>2. $7 \times 2 = \square$</p>
<p>3. $9 + 9 = \square$</p>	<p>3. uhhafu we-<input type="text"/> = 7</p>
<p>4. I-8 siphindiwe = <input type="text"/></p>	<p>4. I-100 liphindiwe = <input type="text"/></p>
<p>5. <input type="text"/> $\times 2 = 12$</p>	<p>5. A-20 ephindiwe = <input type="text"/></p>
<p>6. </p>	<p>6. uhhafu wa-<input type="text"/> = 40</p>
<p>7. I-10 liphindiwe = <input type="text"/></p>	<p>7. uhhafu wa-50 = <input type="text"/></p>
<p>8. </p> <p>uhhafu we-14 = <input type="text"/></p>	<p>8. $16 \div 2 = \square$</p>
<p>9. $10 \div 2 = \square$</p>	<p>9. uhhafu wa-30 = <input type="text"/></p>
<p>10. uhhafu we-18 = <input type="text"/></p>	<p>20. $2 \times 60 = \square$</p>
<p>I-samba sisuselwa ku-20</p>	

Ukuphinda kabili nokuhlukanisa phakathi: Isivivinyo sangaphambili	
INGXENYE 2	Imizuzu e-3 kuleli khasi
1.	A-42 ephindiwe = <input type="text"/>
2.	36 x 2 = <input type="text"/>
3.	64 ÷ 2 = <input type="text"/>
4.	uhhafu we-102 = <input type="text"/>
5.	A-47 ephindiwe = <input type="text"/>
6.	uhhafu wa-38 = <input type="text"/>
7.	uhhafu wa- <input type="text"/> = 52
Ama-39 ephindiwe nga-78	
8.	uhhafu wa-78 nga- <input type="text"/>
9.	39 + 38 = <input type="text"/>
10.	A-39 ephindiwe = 40 + 40 - <input type="text"/>
Isamba sisuselwa e-10	

UKUPHINDA KABILI NOKUHLUKANISA PHAKATHI: ISIFUNDO SOKUQALISA 1

Umzuzu o-1 wokufudumeza ingqondo

‘Ngiyakukhombisa, uyasho’ (ikilasi lonke bese kuba umsebenzi wabafundi ngababili)

a. Uthisha ukhombisa inombolo ‘ephindwe kabili’ esesbenzisa iminwe ezandleni ezimbili, isib.



O-3 kuphindiwe yi-6. Manje ngitsheleni imisho yokuphindiwe engiyikhombisayo.’

Uthisha ukhombisa: O-4 kuphindiwe O-1kuphindiwe O-3 kuphindiwe O-5 kuphindiwe O-2 kuphindiwe

Abafundi basho umusho okunguwona, isb. “O-4 kuphindiwe yi-8”.

b. Abafundi besebenza ngababili bangelula lomsebenzi ukukhombisa i-6 siphindiwe – I-10 liphindiwe besebenzisa iminwe yabo:

Uthisha: Ningababili, ngikhombiseni i-6 siphindiwe.



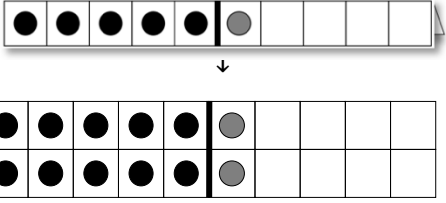
Abafundi ngababili:

Uthisha: Mingaki iminwe seyiyonke kwi-6 siphindiwe?

Cela abafundi ukuthi bakhombise ngathi kusesibukweni izandla zabo eziphelele kanye nezandla ezinomunwe owodwa ovulekile. Lekelela abafundi babone ukuthi impendulo i-12 yakhiwe izandla ezimbili ezineminwe emihlanu nezandla ezimbili nomunwe owodwa: 5 + 5 kanye no 1 + 1.

Ukulandelana komsebenzi

Kulesi sifundo sisebenzisa ulwazi oluyisisekelo ekuphindeneni kabili nokuhlukanisa phakathi ukufika ku-20.

<p>Isibalo: I-6 siphindiwe</p> <p>Khombisa amachashazi ayisithupha ku hhafu wekhadi lokuphinda. Vula ikhadi.</p> <p>Uthisha: Manje senginesithupha esiphindwe kabili. Mangaki amachashazi esewonke?</p> <p>Abafundi: 12</p> <p>Uthisha: Wazi kanjani ukuthi i-6 siphindiwe yi-12?</p> <p>Lalela labo bafundi abathi ikhadi lamachashazi aphinda kabili likhombisa: ‘6 no 6’, ‘amaqembu amabili e-6’, ‘i-6 siphindwe kabili’, ‘6 x 2’.</p>	 <p>I-6 siphindiwe = 12</p> <p>amaqembu amabili esithupha alingana ne-12</p> <p>i-6 siphindwe kabili yi-12</p> <p>6 x 2 = 12</p>
<p>Isibalo: uhhafu we-12</p>	

Khombisa amachashazi ayishumi nambili kukhadi lamachashazi ayidabuli. Goqa ikhadi libe ngu hhafu ebudeni balo.

Uthisha: Manje ngibona uhhafu wamachashazi ayi-12 kanti nawe ubona uhhafu. Ngakho yini uhhafu we-12?

Abafundi: 6

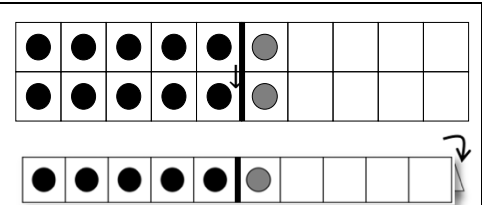
Uthisha: Nazi kanjani ukuthi impendulo i-6?

Lalela uzwe abafundi abanika incazelo kanjengokuthi: 'uhhafu we-12 i-6' noma 'ishumi nambili lihlukaniseke izingxenye ezimbili i-6' or 'ishumi nambili lihlukaniselwe kwa-2 yi-6.

$12 \div 2 = 6$

(Lezi zibonelo mazihlale ebhodini.)

Bhala lokhu kuhlukana kwezimpendulo/imicabango ebhodini.



Uhhafu we-12 i-6

Ishumi nambili lihlukaniseke izingxenye ezimbili i-6.

Ishumi nambili lihlukaniselwe kwa-2 yi-6.

$12 \div 2 = 6$

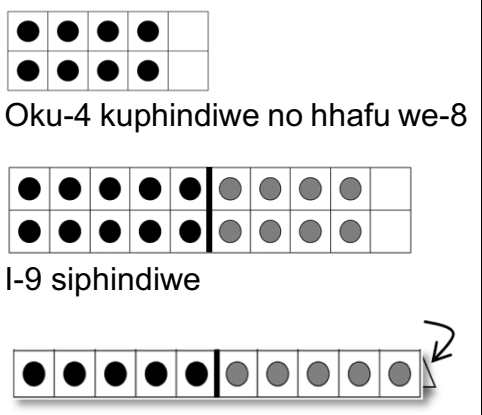
(Lezi zibonelo mazihlale ebhodini.)

Phinda nge: Amakhadi amachashazi e-4 siphindwe kabili nesi-9 siphindwe kabili

Amakhadi amachashazi ka hhafu we-8 nohhafu wa-20

Buza ekilasini ukuze bakuphe izimpendulo ngemisho yezinombolo ezahlukenene ukufanisana nokuphindwe kabili nokuhlukaniswe phakathi kumakhadi amachashazi.

Gqugquzela abafundi ukuthi babone okuhlano kumachashazi amnyama ngokugqamile emakhadini amachashazi nokusebenzisa lokho ukuthola izinombolo zamachashazi ngokushesha. Ngakho, ekuphindweni kwe-9 singabona isi-5 esiphindwe kabili njenge-10 kanye no-4 okuphindiwe njenge-8 ngakho i-9 siphindiwe yi-18.



Oku-4 kuphindiwe no hhafu we-8

I-9 siphindiwe

Imisebenzi yomfundi ngamunye

Manje abafundi kumele bazame umsebenzi womuntu ngayedwa onikeziwe ngesifundo sokuqalisa sokuqala (Lesson Starter 1). Abafundi kufanele baqedele imisho, babhale imisho ngaphansi komboniso kumakhadi amachashazi kushadi lomsebenzi.

Support Video

Ukuphinda nokuhlukanisa phakathi 1



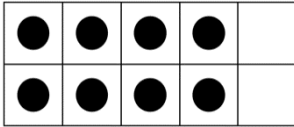
<https://youtu.be/UMmzMVM-SS0>

Igama:

Ukuphinda kabili nokuhlukanisa phakathi Isifundo sokuqalisa I: Umsebenzi womfundi ngamunye

Qedela umusho noma ubhale imisho ngesithombe ngasinye.

1. I-4 siphindiwe



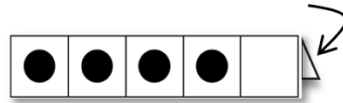
Ephindiwe yi-

Amaqembu amabili yi-

Kuphindwe kabili yi-

x 2 =

2. Uhhafu we-8



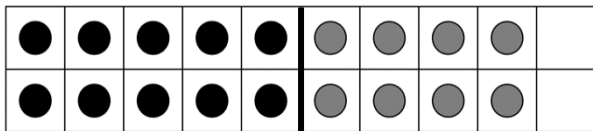
Uhhafu we- yi-

I-8 suhkukaniseke ka-2 yi-

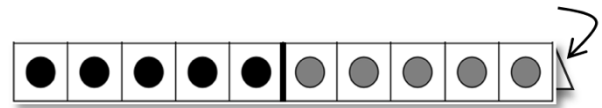
I-8 sihlukaniselwe aba-2 yi-

÷ 2 =

3. I-9 siphindiwe

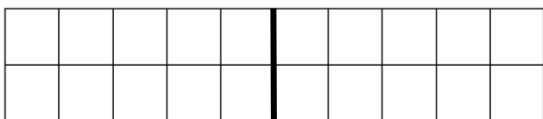


4. Uhhafu wa-20



5. Kuphindiwe

Dweba amachazi enombolo yakho:



6. Uhhafu we-

Dweba amachazi enombolo yakho:



UKUPHINDA KABILI NOKUHLUKANISA PHAKATHI: ISIFUNDO SOKUQALISA 2

Umzuzu o-1 wokufudumeza ingqondo

Pop-Fizz ukuphinda nokuhlukanisa kufike kushumi

a. Uthisha uthi ‘pop’, abafundi bathi ‘fizz’; uthisha usho inombolo, abafundi baphendule **ngokuphinda** (noma isiphindaphindi nge-10 ngaphezulu):

Uthisha: pop	→	Abafundi: fizz	
Uthisha: 1	→	Abafundi: 2	
Uthisha: pop	→	Abafundi: fizz	
Uthisha: 5	→	Abafundi: 10	njalo njalo...

Ukuphinda kufike ku-10: 1 – 2; 3 – 6; 5 – 10; 4 – 8; 2 – 4.

b. Uthisha uthi ‘pop’, abafundi bathi ‘fizz’; uthisha usho inombolo, abafundi baphendule **ngokuhlukanisa phakathi** (noma isiphindaphindi nge-10 ngaphansi):

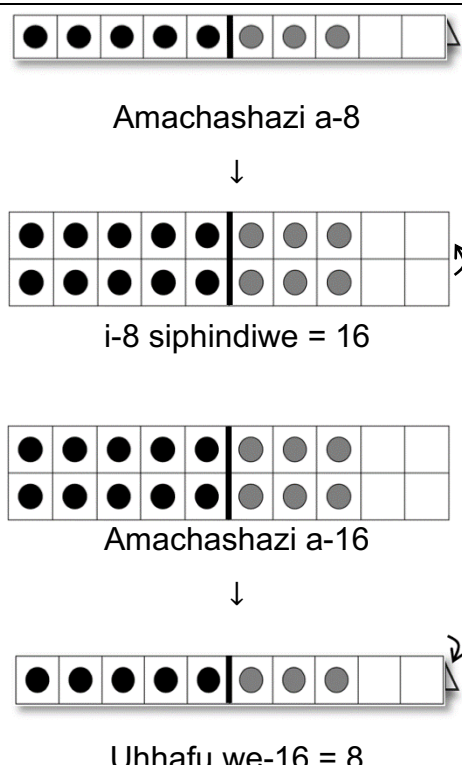
Uthisha: pop	→	Abafundi: fizz	
Uthisha: 8	→	Abafundi: 4	
Uthisha: pop	→	Abafundi: fizz	
Uthisha: 6	→	Abafundi: 3	njalo njalo ...

Ohhafu kufike ku-10: 10 – 5; 6 – 3; 4 – 2; 8 – 4; 2 – 1

Ukulandelana komsebenzi

Kulesi sifundo sizama ukuphinda nokuhlukanisa okusesisekelweni kuye e-20.

Qaphela: Amakhadi amachashazi okuphindaphinda ayatholakala ebhukwini i Print Master.

<p>Isibalo: Xhuma i-8 siphindiwe = <input type="text"/> ;uhhafu we-16=<input type="text"/></p> <p>Sebenzisa ikhadi lamachashazi e-8 liphindiwe. Goqa ikhadi ukukhombisa iqembu elilodwa le-8. Bese uyalivula ukubonisa amaqembu amabili e-8.</p> <p>Uthisha: Yini i-8 siphindiwe?</p> <p>Abafundi: 16</p> <p>Bhala ‘i-8 siphindiwe = 16’ ebhodini</p> <p>Uthisha: Yini uhhafu we-16? (Goqa ikhadi ngesikhathi usho lokhu ukubonisa ukuthi kuhlukaniswa kanjani ngokwenza amaqembu amabili alinganayo.)</p> <p>Abafundi: 8</p> <p>Bhala ‘uhhafu we-16 = 8’ ngezansi komusho wokuphinda ebhodini.</p> <p>Lezi zibonelo zonke kufanele zihlale ebhodini.</p>	 <p style="text-align: center;">Amachashazi a-8</p> <p style="text-align: center;">↓</p> <p style="text-align: center;">i-8 siphindiwe = 16</p> <p style="text-align: center;">Amachashazi a-16</p> <p style="text-align: center;">↓</p> <p style="text-align: center;">Uhhafu we-16 = 8</p>
---	--

Imisebenzi yomfundi ngamunye

Beka amakhadi amachashazi e-5 siphindiwe, i-7 siphindiwe Kanye ne-9 siphindiweebhodini. Abafundi kufanele babhale imisho yezinombolo zokuphinda nezokuhlukanisa ngalamakhadi.

Abafundi mabakhuthazwe ukuchaza ukucabanga kwabo.

Tshela abafundi BANGABALI ngakunye ngakunye.

Uma abafundi beshesha ukuqeda lemisebenzi, bacele ukuthi babhale imisho yezinombolo ngamanye amakhadi amachashazi.

Support Video

Ukuphinda nokuhlukanisa 2



<https://youtu.be/8q1unCfK1Lo>

Support Video

Ukuphinda nokuhlukanisa 3



https://youtu.be/L2_MyczJOyU

UKUPHINDA KABILI NOKUHLUKANISA PHAKATHI: ISIFUNDO SOKUQALISA 3

Umzuzu o-1 wokufudumeza ingqondo

I-Pop-Fizz ukuphinda nokuhlukanisa phakathi kuya kumashumi amabili

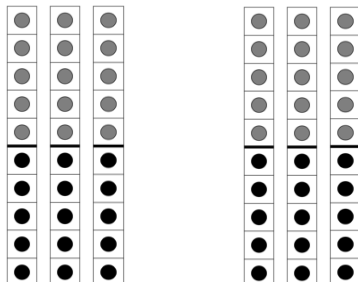

Ukuphinda kuya ku-20: 1 – 2; 3 – 6; 5 – 10; 4 – 8; 2 – 4; 6 – 12; 9 – 18; 7 – 14; 8 – 16; 10 – 20.

Ukuhlukanisa phakathi kuya ku-20: 10 – 5; 6 – 3; 4 – 2; 8 – 4; 2 – 1; 12 – 6; 18 – 9; 14 – 7; 16 – 8; 20 – 10.

Ukulandelana komsebenzi

Kulesi sifundo sizilolongela ukuphinda neziphindaphindi ngeshumi.

Qaphela: Imicu yamachashzi iyatholakala ebhukwini i Print Master.

<p>Inkinga: Xhuma ukuphinda ka-3 = <input type="text"/> ; ukuphinda a-30 = <input type="text"/></p> <p>Sebenzisa imicu eyisithupha yamachashazi ayi-10 uwahlele ukuthi abonise a-30 ephindiwe.</p> <p>Uthisha: Siyazi oku-3 kuphindiwe = 6, ngakhoke yini a-30 ephindiwe?</p> <p>Abafundi: 60</p> <p>Uthisha: A-30 ephindiwe nga-60, ngakhoke yini uhhafu wa-60?</p> <p>Abafundi: 30</p> <p>Bhala imisho yezinombolo njengoba kukhonjisiwe, ucacise ukuthi i-6 kanye na-60 axhumene njengoku-3 nokunga-30. Tshela abafundi ukuthi bakhumbule ukuthi ukuphinda nokuhlukanisa Phakathi kuxhumene.</p> <p>Uthisha: Singasebenzisa imicu ukuthi imele i-10 kunokukhombisa amachashazi ayishumi ngaso sonke isikhathi.</p> <p>Khombisa abafundi ebhodini ukuthi amashumi angaboniswa kanjani futhi kusetshenziswa imicu emide oyidweba ebhodini.</p>	<p>O-3 kuphindiwe = 6</p>  <p>A-30 ephindiwe = 60</p> <p>Uhhafu wa-60 = 30</p> 
---	---

Imisebenzi yomfundi ngamunye

Manje kufanele abafundi bazame lezi zibonelo ezilandelayo ngekhandu:

- | | | |
|-------------------|-------------------|-------------------|
| Oku-2 kuphindiwe | Oku-5 kuphindiwe | Oku-7 kuphindiwe |
| Oku-20 kuphindiwe | Oku-50 kuphindiwe | Oku-70 kuphindiwe |

Tshela abafundi ukuthi BANGABALI nga-1. Kufanele basebenzise ukuxhumana abasanda kukufunda ukubhala ukuphinda okukhulu ngokushesha.

Uma kukhona abafundi abasheshe bayiqede lemisebenzi, banikeze owengeziwe ukuze bazilongele:

- | | | |
|----------------------|----------------------|--------------|
| Oku-3 kuphindiwe | Oku-8 kuphindiwe | Uhhafu we-4 |
| Uhhafu we-8 | | |
| Okunga-30 kuphindiwe | Okunga-80 kuphindiwe | Uhhafu wa-40 |
| Uhhafu wa-80 | | |

UKUPHINDA KABILI NOKUHLUKANISA PHAKATHI: ISIFUNDO SOKUQALISA 4

Umzuzu o-1 wokufudumeza ingqondo

Ukuphinda nokuhlukanisa izinombolo ezilula ukusebenza ngazo

Izinombolo ezinobungane ilezo okulula ukusebenza ngazo. Isikhathi esiningi lezi iziphindaphindi ngeshumi.

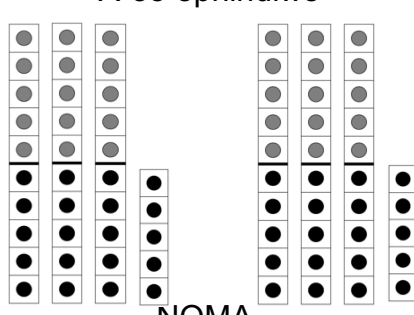
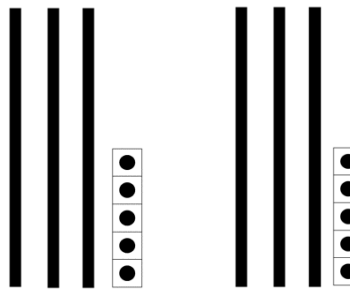
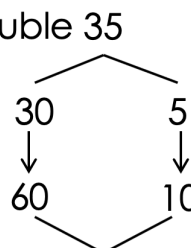
“Yini...?”

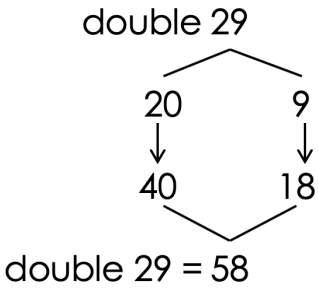
- Uthisha: A-30 ephindiwe → Abafundi: 60
- Uthisha: I-10 liphindiwe → Abafundi: 20
- Uthisha: A-50 ephindiwe → Abafundi: 100
- Uthisha: Uhhafu wa-40 → Abafundi: 20
- Uthisha: Uhhafu wa-50 → Abafundi: 25
- Uthisha: Uhhafu we-100 → Abafundi: 50 njalo njalo...

Ukulandelana komsebenzi

Kulesi sifundo sizilolongela ukuphinda ngezizombolo ezinamadijithi amabili.

Qaphela: Imicu yamachashzi iyatholakala ebhukwini i Print Master.

<p>Isibalo: A-35 ephindiwe</p> <p>Sebenzisa imicu eyisithupha yamachashazi ange-10, kanye nemibili yemicu anga-5, uwahlele ukuthi akhombise a-35 ephindiwe.</p> <p>Uthisha: Umdwebo ukhombisa muphi umusho wezinombolo ophindiwe?</p> <p>Khumbuza ikilasi ukuthi umucu o-1 (kungaba amachashazi noma ulayini) ubonisa ishumi eli-1.</p> <p>Abafundi: A-35 ephindiwe (noma 35 + 35)</p> <p>Uthisha: Singayithola kanjani impendulo?</p> <p>Lalela uzwe abafundi abakhuluma ngokubeka amashumi ndawonye ukuthola amashumi a-6 noma i-60 nokubeka o-5 okubili ndawonye ukuthola i-10.</p> <p>Bhala lindlela yokuhlakaza njengoba ikhonjisiwe ebhodini elingaphesheya.</p>	<p style="text-align: center;">A-35 ephindiwe</p>  <p style="text-align: center;">NOMA</p>  <div style="text-align: center; margin-top: 20px;"> <p>double 35</p>  <p>double 35 = 70</p> </div>
--	---

<p>Isibalo: 29×2</p> <p>Phinda indlela yokuhlakaza wenzele a-29 ephindiwe njengoba kukhonjisiwe. Khumbuza ikilasi ukuthi ukuphindaphinda ngo-2 (noma $\times 2$) kuyafana nokuphinda kabili.</p> <p>Vumela/dedela abafundi bakusize ukugcwalisa ukuphinda ngamashumi kanye nemivo.</p> <p>Abanye abafundi bangathi 29×2 nga-60 – 2 = 58. Nalendlela kufanele yamukelwe.</p>	<div style="text-align: center;"> <p>double 29</p>  <p>double 29 = 58</p> </div>
--	---

Imisebenzi yomfundi ngamunye

Manje abafundi kufanele bazame lezi zibonelo ezilandelayo:

A-41 ephindiwe A-36 ephindiwe A-47 ephindiwe

Abafundi kufanele babhale ukuhlakaza bese bebala ukuphinda ngamashumi nangemivo ngekhandla.

Abafundi kumele bachaze ukucabanga kwabo, isb. “A-47 ephindiwe ukuphinda a-40 (nga-80 lawo) bese kuthi i-7 siphindiwe (yi-14 lelo). 80 no 14 yi-80, 90, 94.”

Tshela abafundi ukuthi BANGABALI nga-1.

Umsebenzi wasekhaya – Ishadi lomsebenzi 1

Ekupheleni kwesifundo sanamuhla, nikeza abafundi ishadi lomsebenzi 1.

Akudingeki ukuthi ubekele abafundi isikhathi uma benza lomsebenzi. Inhloso ukunikeza abafundi ukuzilolonga ngokubhalwayo emsebenzini ebebewenza ngekhandla.

Support Video

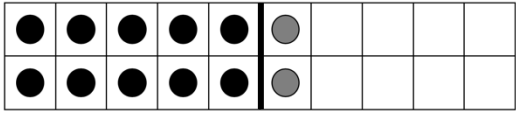
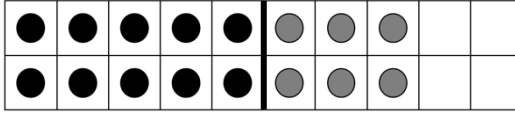
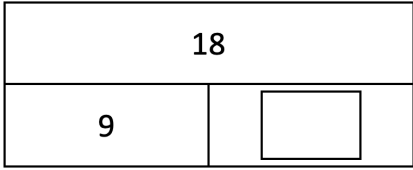
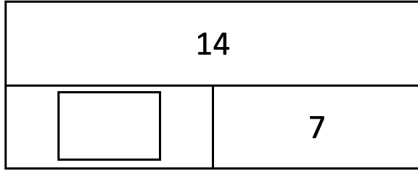
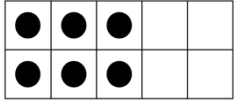
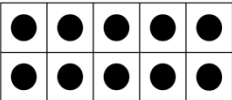
Ukuphinda nokuhlukanisa phakathi 4



<https://youtu.be/qnSniN-bliU>

Igama:

Ukuphinda kabili nokuhlukanisa phakathi: Ishadi lomsebenzi I

<p>I.</p>  <p>$6 + 6 = \square$</p>	<p>II.</p>  <p>$8 + 8 = \square$</p>
<p>2. Uhhafu we-12 = <input type="text"/></p>	<p>12. $11 \times 2 = \square$</p>
<p>3. $9 + 9 = \square$</p>	<p>13. Uhhafu we-<input type="text"/> = 8</p>
<p>4. I-7 siphindiwe = <input type="text"/></p>	<p>14. A-30 ephindiwe = <input type="text"/></p>
<p>5. <input type="text"/> $\times 2 = 16$</p>	<p>15. A-50 ephindiwe = <input type="text"/></p>
<p>6.</p> 	<p>16.</p> 
<p>7. I-10 liphindiwe = <input type="text"/></p>	<p>17. Uhhafu wa-40 = <input type="text"/></p>
<p>8.</p>  <p>Uhhafu we-6 = <input type="text"/></p>	<p>18.</p>  <p>Uhhafu we-10 = <input type="text"/></p>
<p>9. $12 \div 2 = \square$</p>	<p>19. Uhhafu wa-70 = <input type="text"/></p>
<p>10. Uhhafu we-14 = <input type="text"/></p>	<p>20. $2 \times 70 = \square$</p>

Amanothi kathisha

Lapha ungenza amanothi ngesifundo kanye nokuthi yibaphi abafundi abasadinga ukusizwa ngesu lokuxhumanisa kusetshenziswa ishumi. Ungenza namanothi nganoma iyiphi enye into ofuna ukubhekana nayo/ukuyilungisa esifundweni sokuqalisa esilandelayo.

Support Video

Ukuphinda nokuhlukanisa phakathi 5



<https://youtu.be/t2jBnZHnn1Y>

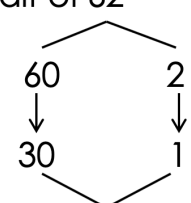
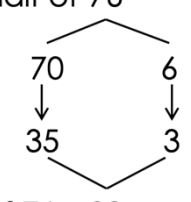
UKUPHINDA KABILI NOKUHLUKANISA PHAKATHI: ISIFUNDO SOKUQALISA 5

Umzuzu o-1 wokufudumeza ingqondo

Ukuphinda kabili nokuhlukanisa phakathi kwezimbobo ezinobungane

Ukulandelana komsebenzi

Kulesi sifundo sizilonga ngokuhlukanisa phakathi izinombolo ezinamadijithi amabili.

<p>Isibalo: $62 \div 2$</p> <p>Khumbuza ikilasi ukuthi ukuhlukanisa ngoku-2 ($\div 2$) kuyafana nokuzama ukuthola uhhafu.</p> <p>Uthisha: Singathola kanjani ukuthi yini uhhafu wa-62?</p> <p>Lalela ukuze uzwe abafundi abakhuluma ngokuhlukanisa phakathi a-60 ukuthola a-30 nokuhlukanisa phakathi o-2 ukuthola o-1, ukuze bathole impendulo e-31.</p> <p>Bhala lendlela “yokuhlakaza” njengoba ikhonjisiwe ebhodini elingaphesheya.</p>	<p>half of 62</p>  <p>half of 62 = 31</p>
<p>isibalo: $76 \div 2$</p> <p>Phinda indlela yokuhlakaza ukuze kutholakale uhhafu wa-76 njengoba kukhonjisiwe. Khumbuza ikilasi ukuthi ukuhlukaniselana nga-2 (noma $\div 2$) kuyafana nokuhlukanisa phakathi.</p> <p>Dedela abafundi ukuthi bakusize ukugcwalisa ohhafu bamashumi nabemivo.</p>	<p>half of 76</p>  <p>half of 76 = 38</p>

Imisebenzi yomuntu ngamunye

Manje abafundi kufanele bazame lezi zibonelo ezilandelayo:

Uhhafu wa-42 $68 \div 2$ $34 \div 2$

Abafundi kufanele babhale indlela yokuhlakaza bese bethola ohhafu bokweshumi nabemivo ngekhandu.

Abafundi kufanele bachaze ukucabanga kwabo, isb. “ $34 \div 2$ nguhhafu wa-30 (yi-15 lelo) kanti uhhafu we-4 (o-2 lokho). I-15 no-2 yi-17.”

Tshela abafundi BANGABALI nga-1.

Support Video

Ukuphinda nokuhlukanisa phakathi 6



<https://youtu.be/fxDY11LICsc>

UKUPHINDA KABILI NOKUHLUKANISA PHAKATHI: ISIFUNDO SOKUQALISA 6

Umzuzu o-1 wokufudumeza ingqondo

Kusho ngenye indlela:

Sebenza ngezibonakaliso ezehlukahlukene zokuphinda kabili nokuhlukanisa phakathi. Lokhu kungahlanganisa amagama anjengo 'siphindiwe i-7' no 'hhafu we-16', noma okunye okungasetshenziswa njengo 'amaqembu amabili e-7' noma '7 no 7' noma '7 + 7' noma '16 ÷ 2' noma 'ishumi nesithupha lihlukaniselwe kwababili'.

Lokhu kungahlanganisa nokunikeza isithombe njengalesi esingezansi:

9	9
18	

Abafundi kufanele baphe izindlela zokusho noma zokubhala 'siphindiwe i-9 = 18' isib. $9 + 9 = 18$ $18 - 9 = 9$
izishiyagalolunye ezimbili zenza i-18 $9 \times 2 = 18$

Ukulandelana komsebenzi

Kulesi sifundo sisebenzisa ukuphinda kabili nokuhlukanisa phakathi ngezindlela ezahlukahlukene.

<p>Isibalo: Ephindiwe a-26</p> <p>Cela abafundi ukuthi basho abakubonayo emdwebweni ngezindlela ezahlukene.</p> <p>Isibonelo, ephindiwe a-26 kuyafana na-26 x 2 noma 'amaqembu amabili a-26'. Esinye isibonelo ukuthi ephindiwe a-26 o-2 ngaphezu kwa-25 aphindwe kabili ngoba iqembu ngalinye lino-1 ngaphezulu.</p> <p>Gcwalisela nanganoma yimiphi imicabango evela kubafundi ngomdwebho.</p> <p>Abanye abafundi bangakupha ukubala ngokususa $52 - 26 = 26$. Kubhale lokhu emdwebweni uma kunikeziwe. Ukuxhumanisa ukuhlukanisa nokususa kuyafundiswa njengesu ezifundweni zokuqalisa ezingasekugcineni.</p>	
---	--

Imisebenzi yomfundi ngamunye

Manje abafundi kufanele babhale ulwembu lwamaqiniso, njengaleli elingaphezulu, exhunywe na:

$$43 \text{ ephindiwe} = 86$$

Abafundi kufanele bachaze ukucabanga kwabo, isb. "Ngiyazi a-43 na-43 nga-86" noma "A-43 ephindiwe nga-86, ngakho, Ngiyazi a-430 ephindiwe nga-860."

Uma kukhona abafundi abashesha ukuwuqeda lomsebenzi, bacele bakhe olunye ulwembu lwamaqiniso axhumanayo beqala nganoma ikuphi ukuphinda kabili noma ukuhlukanisa phakathi abakukhethayo.

UKUPHINDA KABILI NOKUHLUKANISA PHAKATHI: ISIFUNDO SOKUQALISA 7

Umzuzu o-1 wokufudumeza ingqondo

Ukuphinda nokuhlukanisa phakathi kweziphindaphindi ze-10, 100, 1000

“Yini i-...?”

- Uthisha: 10 Liphindiwe → Abafundi: 20
- Uthisha: 100 Liphindiwe → Abafundi: 200
- Uthisha: 1000 Liphindiwe → Abafundi: 2000
- Uthisha: uhhafu wa-40 → Abafundi: 20
- Uthisha: uhhafu wa-400 → Abafundi: 200
- Uthisha: uhhafu we-4000 → Abafundi: 2000 njalo njalo...

Ukulandelana komsebenzi

Kulesi sifundo sizilonga ukuphinda kabili nokuhlukanisa phakathi kweziphindaphindi ze-10.

<p>Isibalo: ephindiwe a-34 → ephindiwe ama-340 → ziphindiwe i-3400</p> <p>Uthisha: Singathola kanjani ukuthi a-34 ephindwe kabili yini?</p> <p>Lalela ukuze uzwe abafundi abakhuluma nokuphinda kabili a-30 ukuthola a-60 kanye nokuphinda kabili i-4 ukuthola i-8, ukuthola a-68.</p> <p>Uma abafundi bebanengcindezi ukubala lokhu ngekhandla, bhala lendlela yokuhlakaza njengoba ikhonjisiwe.</p> <p>Uthisha: Singakwazi ukusebenzisa esikwaziyo ngokuphinda a-34 ukukwazi ukuthola ukuthi ama-340 ephindiwe azo yini?</p> <p>Lalela ukuze uzwe abafundi abathi a-340 makhulu ngama-10 ngaphezulu kuna-34 ngakho ephindiwe a-340 makhulu angamashumi amaningi ngaphezulu kuna-68; lokhu nga-680.</p>	<div style="text-align: center;"> <p>double 34</p> <p>double 34 = 68</p> </div> <p>ephindiwe a-34 = 68</p> <p>ephindiwe ama-340 = <input style="width: 40px; height: 20px;" type="text"/></p>
<p>Isibalo: uhhafu wa-46 → uhhafu wa-460</p> <p>Uthisha: Singathola kanjani ukuthi uhhafu wa-46 yini?</p> <p>Lalela ukuze uzwe abafundi abakhuluma ngokuhlukanisa phakathi a-40 ukuthola a-20 nokuhlukanisa i-6 ukuthola o-3, ukuthola a-23.</p> <p>Uma abafundi bebanengcindezi ukubala lokhu ngekhandla, bhala lendlela yokuhlakaza njengoba ikhonjisiwe.</p>	<div style="text-align: center;"> <p>half of 46</p> <p>half of 46 = 23</p> </div>

<p>Uthisha: Singakwazi ukusebenzisa esikwaziyo ngohhafu wa-46 ukukwazi ukuthola ukuthi uhhafu wa-460 uzoba yini?</p> <p>Lalela ukuze uzwe abafundi abathi ama-460 maningi ngaphezulu ngokuyi-10 kuna-46 ngakho uhhafu wa-460 ungama-10 aphindwe ngokwa-23 = 230.</p>	<p>uhhafu wa-46 = 23</p> <p>uhhafu wa-460 = <input type="text"/></p>
--	--

Imisebenzi yomfundi ngamunye

Manje abafundi kufanele babhale ulwembu lwamaqiniso, njengaleli elingaphezulu, elixhumanise a-:

45 ephindiwe	27 ephindiwe	uhhafu wa-82	uhhafu wa-76
450 ephindiwe	270 ephindiwe	uhhafu wa-820	uhhafu wa-760

Gqugquzela abafundi ukuthi babale ngekhandla okuphindwa kabili noma okuhlukaniswa phakathi okokuqalauma bengakwazi nokusebenzisa iphethini ukukwazi ukuphendula okuphindwayo noma okuhlukaniswa phakathi okulandelayo ngokushesha abangakwazi ukukwenza.

Umsebenzi wasekhaya – Ishadi lomsebenzi 2

Ekupheleni kwesifundo sanamuhla nikeza abafundi ishadi lomsebenzi 2.

Akudingeki ukuthi ubekele abafundi isikhathi uma benza lomsebenzi. Inhloso ukunikeza abafundi ukuzilolonga ngokubhalwayo emsebenzini ebebewenza ngekhandla.

Support Video

Ukuphinda nokuhlukanisa phakathi 7



<https://youtu.be/JJUPpmMdaAw>

Igama:

Ukuphinda kabili nokuhlukanisa phakathi: Ishadi lomsebenzi 2

1. A-32 ephindiwe nga- <input type="text"/>	11. A-44 ephindiwe nga- <input type="text"/>
2. $26 \times 2 =$ <input type="text"/>	12. $38 \times 2 =$ <input type="text"/>
3. $42 \div 2 =$ <input type="text"/>	13. $86 \div 2 =$ <input type="text"/>
4. Uhhafu we-110 = <input type="text"/>	14. Uhhafu we-104 = <input type="text"/>
5. A-23 ephindiwe = <input type="text"/>	15. A-39 ephindiwe = <input type="text"/>
6. Uhhafu we-36 = <input type="text"/>	16. Uhhafu wa-48 = <input type="text"/>
Ephindiwe a-31 nga-62	Ephindiwe a-49 nga-98
7. $2 \times 31 =$ <input type="text"/>	17. $2 \times 49 =$ <input type="text"/>
8. Uhhafu we-62 nga- <input type="text"/>	18. Uhhafu wa-98 nga- <input type="text"/>
9. $31 + 32 =$ <input type="text"/>	19. $49 + 48 =$ <input type="text"/>
10. A-31 ephindiwe = $30 + 30 +$ <input type="text"/>	20. A-49 ephindiwe = $50 + 50 -$ <input type="text"/>

Amanothi kathisha

Lapha ungenza amanothi ngesifundo kanye nokuthi yibaphi abafundi abasadinga ukusizwa ngesu lokuxhumanisa kusetshenziswa ishumi. Ungenza namanothi nganoma iyiphi enye into ofuna ukubhekana nayo/ukuyilungisa esifundweni sokuqalisa esilandelayo.

Support Video

Ukuphinda nokuhlukanisa phakathi 8



https://youtu.be/qp_sjzqLw

UKUPHINDA KABILI NOKUHLUKANISA PHAKATHI: ISIFUNDO SOKUQALISA 8

Umzuzu o-1 wokufudumeza ingqondo

Ukuphinda kabili nokuhlukanisa ngezinombolo ezinobungani/okulula ukusebenza ngazo

Ukulandelana komsebenzi

Kulesi sifunso sakha amaqiniso anobudlelwano enobuhlobo nezinombolo ngokuphinda nokuhlukanisa phakathi okunikeziwe, kuhlangukiswa nokuphinda okuseduze.

<p>Isibalo: I-17 liphindiwe</p> <p>Cela abafundi ukuthi basho abakubonayo emdwebweni ngezindlela ezahlukene.</p> <p>Isibonelo, $17 + 18$ kufanele abe o-1 ngaphezulu kune-$17 + 17$. Esinye isibonelo ukuthi i-17 siphindiwe ngo-2 ngaphezulu kune-16 siphindwe kabili ngoba iqembu ngalinye lino-1 ngaphezulu kulona.</p> <p>Gcwalisela nanganoma yimiphi imicabango evela kubafundi emdwebweni.</p> <p>Abanye abafundi bangakupha ukubala ngokususa</p> <p>$34 - 17 = 17$. Kubhale lokhu emdwebweni uma kunikeziwe. Ukuxhumanisa ukuhlanganisa nokususa kuyafundiswa njengesu ezifundweni zokuqalisa ezingasekugcineni.</p>	
---	--

Imisebenzi yomfundi ngamunye

1. Manje abafundi kufanele babhale ulwembu lwamaqiniso, njengaleli elingaphezulu, elixhumanise a-:

A-38 ephindiwe = 76

Isibonelo, ' $38 + 38 = 76$ ' noma 'uhhafu wa-760 = 380' noma 'uhhafu ka hhafu wa-76 = 19'

Abafundi kufanele bachaze ukucabanga kwabo, isb. "ikota la-76 yi-19 ngoba ngihlukanise phakathi ngaphinde futhi ngahlukanisa phakathi".

Tshela abafundi BANGABALI nga-1.

2. Abafundi kufanele bazame ukuphendula lemibuzo:

Yini a-99 ephindiwe?

Qedela lo musho: a-99 ephindiwe = I-100 liphindiwe – □

Yini a-49 ephindiwe?

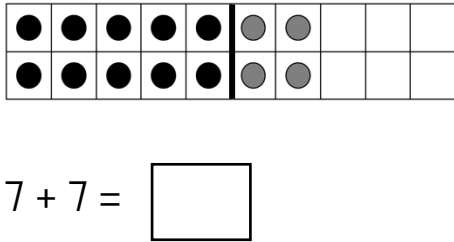
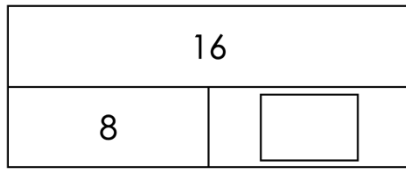
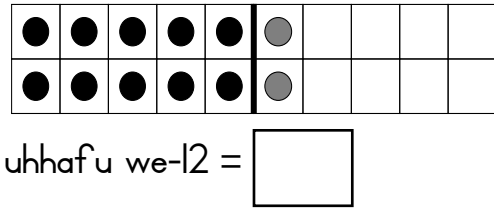
Uma kukhona abafundi abashesha ukuwuqeda lomsebenzi, bacele bakhe olunye ulwembu lwamaqiniso axhumanayo beqala nganoma ikuphi ukuphinda kabili noma ukuhlukanisa phakathi abakukhethayo.

Igama:

Ukuphinda kabili nokuhlukanisa phakathi: Isivivinyo esandulelayo

INGXENYE I

Imizuzu e-2 kuleli khasi

<p>1. </p>	<p>1. $14 + 14 =$ <input type="text"/></p>
<p>2. uhhafu we-14 = <input type="text"/></p>	<p>2. $7 \times 2 =$ <input type="text"/></p>
<p>3. $9 + 9 =$ <input type="text"/></p>	<p>3. uhhafu we-<input type="text"/> = 7</p>
<p>4. I-8 siphindiwe = <input type="text"/></p>	<p>4. I-100 liphindiwe = <input type="text"/></p>
<p>5. <input type="text"/> $\times 2 = 14$</p>	<p>5. A-20 ephindiwe = <input type="text"/></p>
<p>6. </p>	<p>6. uhhafu wa-<input type="text"/> = 40</p>
<p>7. I-10 liphindiwe = <input type="text"/></p>	<p>7. uhhafu wa-50 = <input type="text"/></p>
<p>8. </p>	<p>8. $18 \div 2 =$ <input type="text"/></p>
<p>9. $10 \div 2 =$ <input type="text"/></p>	<p>9. uhhafu wa-30 = <input type="text"/></p>
<p>10. uhhafu we-18 = <input type="text"/></p>	<p>20. $2 \times 60 =$ <input type="text"/></p>
<p>I-samba sisuselwa ku-20</p>	

Ukuphinda kabili nokuhlukanisa phakathi: Isivivinyo esandulelayo	
INGXENYE 2	Imizuzu e-3 kuleli khasi
1.	A-42 ephindiwe = <input type="text"/>
2.	36 x 2 = <input type="text"/>
3.	64 ÷ 2 = <input type="text"/>
4.	uhhafu we-102 = <input type="text"/>
5.	A-99 ephindiwe = <input type="text"/>
6.	uhhafu wa-38 = <input type="text"/>
7.	uhhafu we- <input type="text"/> = 52
Ephindiwe a-39 yi-78	
8.	uhhafu wa-78 yi <input type="text"/>
9.	39 + 38 = <input type="text"/>
10.	A-39 ephindiwe = 40 + 40 - <input type="text"/>
Isamba sisuselwa e-10	

UKUSONDEZELA NOKULUNGISA

Isingeniso

Okubhekela ezifundweni zokuqalisa ezintathu okuqalwa ngazo, ukuhlanganisa kusetshenziswa ukusondezela kwinombolo okulula ukusebenza ngayo bese kulungiswa. Ezifundweni zokuqalisa ezintathu ezilandelayo, injongo isekususeni kusetshenziswa ukusondezela nokulungisa. Izifundo ezimbili zokugcina zinenjongo yokubala lapho inombolo engaphezulu kweyodwa ingasondezelwa kunombolo okulula ukusebenza ngayo. Izinombolo ezinobungani ilezo okulula ukusebenza ngazo. Ngokujwayelekile lezi kuba iziphindaphindi ngeshumi. Eminye imisebenzi iholwa nguthisha ebhodini kanti eminye eyabafundi ukuthi bayenze ngabodwana.

Amakhono okukhumbula ngokushesha

Ayisithupha amakhono okukhumbula ngokushesha okufanele abafundi bawazi ukuze bazi isu lokusondezela bese beyalungisa:

- Bala uqhubeke noma ubuyele emuva nge-10 kusukela kunoma iyiphi inombolo (isb. 12, 22, 32, noma 57, 47, 37, ...)
- Hlanganisa noma susa o-1, 2 no-3 kusukela kunoma iyiphi inombolo ngokuxhumanisa noma ukungaxhumanisi kusetshenziswa ishumi (isb. $49 + 1 = 50$ noma $30 - 2 = 28$; $49 + 2 = 51$ noma $52 - 3 = 49$).
- hlanganisa isiphindaphindi ngeshumi kunoma iyiphi inombolo (isb. $61 + 20 = 81$)
- susa isiphindaphindi ngeshumi kunoma iyiphi inombolo (isb. $46 - 30 = 16$)
- ukwazi isiphindaphindi ngeshumi esiseduze (isb. 47 usondelene na-50; 39 usondelene na-40)
- ukwazi ukuthi ufika kanjani kusiphindaphindi seshumi (isb. A-43 akude ngo-3 ku-40; 19 likude ngo-1 ku-20).

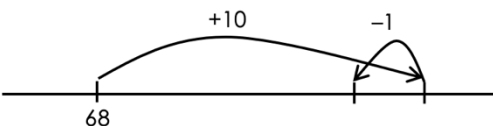
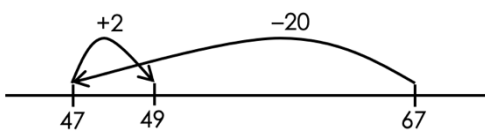
Igama:

Ukusondezela nokulungisa: Isivivinyo sangaphambili

INGXENYE I

Imizuzu e-2 kuleli khasi

1. $23 + 30 = \square$	11. $69 + 2 = \square$
2. $42 - 3 = \square$	12. $68 + 10 = \square$
3. $57 - 10 = \square$	13. $38 + 3 = \square$
4. $51 - 2 = \square$	14. $145 + 30 = \square$
5. $137 - 20 = \square$	15. $97 - 60 = \square$
6. $43 + 40 = \square$	16. $48 = \square - 2$
7. $29 = \square - 1$	17. $49 + \square = 50$
8. $67 + \square = 70$	18. ephindiwe a-50 = \square
9. $97 = 100 - \square$	19. I-100 liphindiwe = \square
10. $88 + \square = 90$	20. $28 + \square = 30$
Isamba sisuselwa ku-20	

Ukusondezela nokulungisa: Isivivinyo sangaphambili					
INGXENYE 2	Imizuzu e-3 kuleli khasi				
1.	$34 + 29 = \square$				
2.	$64 - 19 = \square$				
3.	$27 + 98 = \square$				
4.	$234 - 99 = \square$				
5.	$97 + 98 + 99 = \square$				
6.	 $68 + \square = 68 + 10 - 1$				
7.	 $67 - 18 = 67 - 20 + \square$				
8.	$56 + 28 = 56 + \square - 2$				
9.	$84 - 39 = 84 - \square + 1$				
10.	<p>Kokelezela umusho wezinombolo onikeza impendulo efanayo na-:</p> <p style="text-align: center;">$80 - 59$</p> <table style="width: 100%; border: none;"> <tr> <td style="text-align: center;">$80 + 60 - 1$</td> <td style="text-align: center;">$80 - 60 - 1$</td> </tr> <tr> <td style="text-align: center;">$80 - 60 + 1$</td> <td style="text-align: center;">$80 + 60 + 1$</td> </tr> </table>	$80 + 60 - 1$	$80 - 60 - 1$	$80 - 60 + 1$	$80 + 60 + 1$
$80 + 60 - 1$	$80 - 60 - 1$				
$80 - 60 + 1$	$80 + 60 + 1$				
Isamba sisuselwa e-10					

UKUSONDEZELA NOKULUNGISA: ISIFUNDO SOKUQALISA 1

Umzuzu o-1 wokufudumeza ingqondo

a. Zungeza igumbi ka-10 ngaphezulu

Uthisha usho inombolo bese abafundi bephendula ngokuthi zungeza igumbi ka-10 ngaphezulu kunenombolo yokugcina.

Uthisha: 16

Umfundi 1: 26 → Umfundi 2: 36 → Umfundi 3: 46 → Umfundi 4: 56 njalo njalo.

b. Hlanganisa iziphindaphindi nge-10

“Yini a-...?”

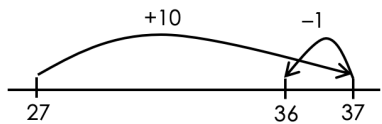
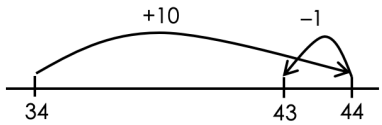
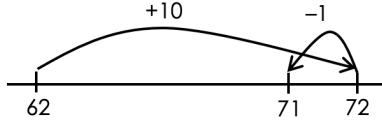
Uthisha: 43 + 20 → Abafundi: 63

Uthisha: 35 + 20 → Abafundi: 55

Uthisha: 42 + 30 → Abafundi: 72 njalo njalo ...

Ukulandelana komsebenzi

Kulesi sifundo sazisa isu lokusondezela nokulungisa.

<p>Cela abafundi banikeze izimpendulo emsebenzini osebhodini (ovezwe ngakwesokudla) bese ubuza abafundi ukuthi baqaphelani.</p> <p>Uthisha: Yini oyiqaphelayo?</p> <p>Abafundi: Ukuhlanganisa i-9 kunikeza impendulo efanayo nokuhlanganisa i-10 ususa o-1.</p>	<p>Bhala ebhodini:</p> <p>27 + 9 = 27 + 10 =</p> <p>34 + 9 = 34 + 10 =</p> <p>62 + 9 = 62 + 10 =</p>
<p>Uthisha: Izinombolo ezinobungani ilezo okulula ukusebenza ngazo. Ishumi inombolo enobungani. Kule lisu, uma sihlanganisa i-9, si sondezela inombolo 9 e-10. Senza lokhu ngoba iseduze kwe-10 kanti i-10 inombolo enobungani ngakho kulula ukuyihlanganisa.</p> <p>Bese sihlanganisa i-10 bese silungisa impendulo yethu ngokususa o-1 okungaphezulu esikuhlanganisile ngesikhathi sisondezela.</p> <p>Khombisa 27 + 9; 34 + 9 kanye na-62 + 9 ngolayini bezinombolo ebhodini.</p> <p>Uthisha: Lelisu/iqhinga silibiza ngokusondezela bese siyalungisa.</p> <p>Cela ukuthi abafundi basho amagama ukusondezela kanye nokulungisa baphimisele ukhombela lamagama ngesikhathi bewasho.</p>	<p>27 + 9</p>  <p>34 + 9</p>  <p>62 + 9</p>  <p>Bhala ebhodini:</p> <p>Ukusondezela nokulungisa</p>

Imisebenzi yomfundi ngamunye

Manje abafundi kufanele bazame izibonelo ezilandelayo *ngekhandu*:

$33 + 9$

$48 + 9$

$76 + 9$

$84 + 9$

Abafundi kufanele bachaze imicabango yabo, isb. “Ngokwa-33 + 9, ngisondezela i-9 e-10 bese ngihlanganisa i-10 e-33 ukuthola a-43; bese ngilungisa impendulo ngokususa o-1, ngakhoke impendulo nga-42.” Ngesikhathi uphinda izindlela zabafundi gcizelela lapho besondezela nalapho belungisa khona.

Support Video

Ukusondezela nokulungisa 1



<https://youtu.be/jpwwwujejpl>

UKUSONDEZELA NOKULUNGISA: ISIFUNDO SOKUQALISA 2

Umzuzu o-1 wokufudumeza ingqondo

a. I-Pop-Fizz: Isiphindaphindi nge-10 esiseduze

Uthisha uthi 'pop' abafundi bathi 'fizz'; bese uthisha esho inombolo, abafundi baphendule ngenye inombolo.

Kuleveshini, abafundi kufanele baphendule ngesiphindaphindi ngeshumi esiseduzane.

Uthisha: pop	→	Abafundi: fizz	
Uthisha: 18	→	Abafundi: 20	
Uthisha: pop	→	Abafundi: fizz	
Uthisha: 37	→	Abafundi: 40	
Uthisha: pop	→	Abafundi: fizz	
Uthisha: 42	→	Abafundi: 40	
Uthisha: pop	→	Abafundi: fizz	
Uthisha: 33	→	Abafundi: 30	njalo njalo...

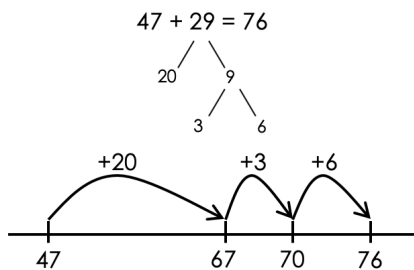
b. I-Pop-Fizz: Indlela yokweqela kusiphindaphindi nge-10 esiseduzane

Ngalesi sikhathi abafundi basho okufanele kwenzeke ukufinyelela kusiphindaphindi ngeshumi esiseduzane.

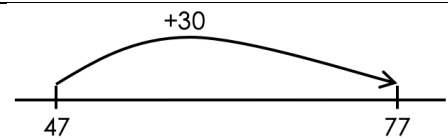
Uthisha: 7	→	Abafundi: +3	
Uthisha: 28	→	Abafundi: +2	
Uthisha: 19	→	Abafundi: +1	
Uthisha: 43	→	Abafundi: -3	
Uthisha: 32	→	Abafundi: -2	
Uthisha: 11	→	Abafundi: -1	njalo njalo ...

Ukulandelana komsebenzi

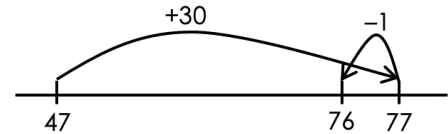
Kulesi sifundo sethula isu lokusondezela nokulungisa ukuze sihlanganise.

<p>Buza abafundi ukuthi bakhumbulani ngamasu okweqa.</p> <p>Uthisha: Ngesikhathi sisebenzisa isu lokweqa, sibale kanjani a-$47 + 29$?</p> <p>Vumela abafundi ukuthi bachaze indlela bese ucela umfundi ukuthi ayikhombise ebhodini. Khumbuza abafundi izinyathelo: qopha, hlakaza, yeqa/gxuma bese uyaphendula.</p> <p>Abafundi: Hlanganisa a-20 kuma-47 ukuthola a-67, bese uhlanganisa o-3 ukufika e-70, bese uhlanganisa ($3 + 6 = 9$).</p>	<p>Umsebenzi ophelele wasebhodini ukhonjiswe ngezansi:</p> 
<p>Uthisha Uthisha: Iyiphi inombolo enobungani a-29 asondelene nayo?</p>	<p>$47 + 29$</p>

Abafundi: 30
 Uthisha: Uma sisondezela a-29 ku-30 bese seqa/sigxume a-30 siya phambili ukusuka ku-47 singaba kuphi?
 Abafundi: 77(khombisa lokhu ebhodini)
 Uthisha: Ngabe a-77 impendulo yokugcina noma kufanele **silungise**?
 Buza abafundi bachaze isizathu sokulungisa impendulo: Sihlanganise okukodwa ngaphezulu, ngakhoke kufanele sisuse okukodwa kumpendulo ukuthola a-76.
 Bonisa lokhu kulayini wezinombolo ebhodini.
 Tshela abafundi ukuthi lendlela yokusondezela nokulungisa isebenza kahle uma inombolo eyodwa iseduzane kakhulu nenombolo enobungani.



Hlanganisa kulayini wezinombolo:



Umsebenzi womfundi ngamunye

Manje abafundi kufanele bazame izibonelo ezilandelayo *ngekhandu*:

$26 + 19$ $54 + 39$

Abafundi kufanele bachaze imicabango yabo, isb. “Ngokwa-26 + 19, ngisondezela i-19 ku-20 bese ngihlanganisa a-20 ku-26 ukuhola a-46; bese ngilungisa impendulo ngokususa o-1, ngakho impendulo nga-45.” Ngesikhathi uphinda izindlela zabafundi gcizelela lapho besondezela nalapho belungisa khona.

Support Video

Ukusondezela nokulungisa 2



<https://youtu.be/fGILndzXfSY>

UKUSONDEZELA NOKULUNGISA: ISIFUNDO SOKUQALISA 3

Umzuzu o-1 wokufudumeza ingqondo

a. i-Pop-Fizz: Indlela yokweqela kusiphindaphindi nge-10 esiseduzane

b. Ukubala okusheshayo: Susa o-1, 2 noma o-3

“Yini a-...?”

Uthisha: $63 - 1 \rightarrow$ Abafundi: 62

Uthisha: $54 - 2 \rightarrow$ Abafundi: 52

Uthisha: $78 - 1 \rightarrow$ Abafundi: 77

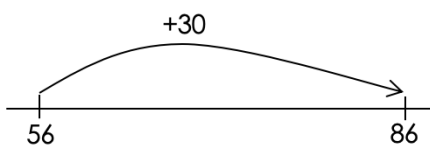
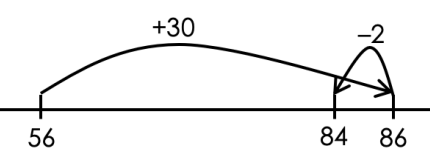
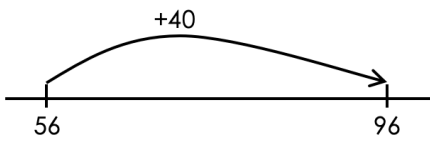
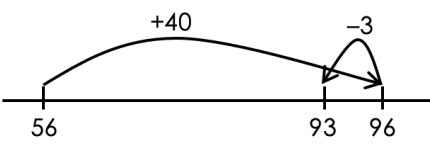
Uthisha: $61 - 2 \rightarrow$ Abafundi: 59

Uthisha: $52 - 3 \rightarrow$ Abafundi: 49

njalo njalo...

Ukulandelana komsebenzi

Kulesi sifundo sisebenzisa isu lokusondezela nokulungisa ukuhlanganisa.

<p>Uthisha: Uma sihlanganisa a-28 noma a-38 noma a-48 kunombolo, singakwazi ukusebenzisa indlela yokusondezela nokulungisa? Singakwazi ukuyisebenzisa ukuxazulula: $56 + 28$? Iyiphi inombolo enobungani a-28 asondele kuyo?</p> <p>Abafundi: 30</p> <p>Uthisha: Uma sisondezela a-28 ku-30 bese seqa a-30 siya phambili ukusuka e-56, singaba kuphi?</p> <p>Abafundi: 86</p> <p>Uthisha: Sizowalungisa kanjani a-86?</p> <p>Buza abafundi bachaze isizathu sokulungisa impendulo: sihlanganise okubili ngaphezulu, ngakho kufanele sisuse okubili kwimpendulo ukuthola a-84.</p> <p>Bonisa lokhu kulayini wezinombolo ebhodini.</p>	<p>$56 + 28$</p>  <p>Hlanganisa kulayini wezinombolo:</p> 
<p>Uthisha: Uma sihlanganisa a-27 noma a-37 noma a-47 kwinombolo, singayisebenzisa indlela yokusondezela nokulungisa? Singakwazi ukuyisebenzisa ukuxazulula $56 + 37$? Iyiphi inombolo enobungani a-37 asondele kuyo?</p> <p>Abafundi: 40</p> <p>Uthisha: Uma sisondezela a-37 ku-40 bese seqa a-40 ukuya phambili, singaba kuphi?</p> <p>Abafundi: 96</p> <p>Uthisha: Sizowalungisa kanjani a-96?</p>	<p>$56 + 37$</p>  <p>Hlanganisa kulayini wezinombolo:</p> 

<p>Buza abafundi bachaze isizathu sokulungisa impendulo: sihlanganise okuthathu ngaphezulu, ngakho kufanele sisuse okuthathu kwimpendulo ukuthola a-93.</p>	
---	--

Bonisa lokhu kulayini wezinombolo ebhodini.

Imisebenzi yomfundi ngamunye

Manje abafundi kufanele bazame izibonelo ezilandelayo *ngekhandu*:

$$25 + 18 \quad 44 + 48 \quad 65 + 27$$

Abafundi kufanele bachaze imicabango yabo, isb. “Nga-25 + 18, ngisondezela i-18 ku-20 bese ngihlanganisa a-20 ku-25 ukuthola a-45; bese ngilungisa impendulo ngokususa o-2, ngakho impendulo a-43.” Ngesikhathi uphinda izindlela zabafundi gcizelela lapho besondezela khona nalapho belungisa khona.

Support Video

Ukusondezela nokulungisa 3



https://youtu.be/St5nSH_BdRE

UKUSONDEZELA NOKULUNGISA: ISIFUNDO SOKUQALISA 4

Umzuzu o-1 wokufudumeza ingqondo

a. Zungeza igumbi nge-10 ngaphansi

Uthisha usho inombolo bese abafundi bephendula ngokuthi zungezela igumbi ngoku-10 ngaphansi kunenombolo ekugcinwe ngayo.

Uthisha: 128

Umfundi 1: 118 → Umfundi 2: 108 → Umfundi 3: 98 → Umfundi 4: 88 kanjalo kanjalo.

b. Susa iziphindaphindi nge-10

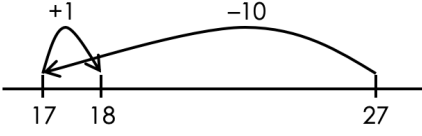
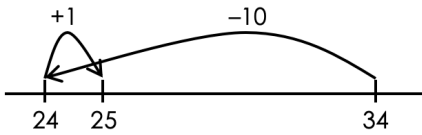
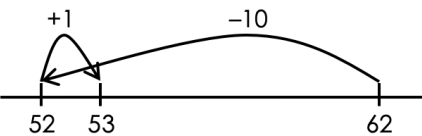
“Yini a-...?”

Uthisha: $71 - 20 \rightarrow$ Abafundi: 51

Uthisha: $59 - 30 \rightarrow$ Abafundi: 29 kanjalo kanjalo...

Ukulandelana komsebenzi

Kulesi sifundo sisebenzisa isu lokusondezela nokulungisa ukususa.

<p>Uthisha: Singalisebenzisa isu lokusondezela nokulungisa ukususa izinombolo ezisondelele nalezo ezinobungani.</p> <p>Bese senza a-27 ehlanganiswa ne-9, sihlanganisa i-10 bese silungisa ngokususa okukodwa. Singenza a-27 - 9 njenga $27 - 10$ bese silungisa ngokuhlanganisa oku-1 ngoba besithathe okukodwa ngaphezulu.</p>	<p>$27 - 9 = 27 - 10$ bese uhlanganisa o-1</p> 
<p>Uthisha: Asenze ukubala okungeziwe sisebenzisa ukusondezela nokulungisa ngokususa i-9. $34 - 9$ uyafana na-$34 - 10$ (usondezela) bese uhlanganisa okukodwa obekuthathiwe (ukulungisa).</p>	<p>$34 - 9$</p> 
<p>Dweba umugqa wezinombolo njengoba kukhonjisiwe.</p> <p>Uthisha: Ngakho $34 - 9 = 25$.</p> <p>Yenza $62 - 9$ njengesinye isibonelo ngendlela efanayo ubonise umugqa wezinombolo ebhodini.</p>	<p>$62 - 9$</p> 

Imisebenzi yomfundi ngamunye

Manje abafundi kufanele bazame izibonelo ezilandelayo *ngekhand*:

$$23 - 9 \quad 48 - 9 \quad 76 - 9$$

Abafundi kufanele bachaze imicabango yabo, isb. “Ngokwa-23 – 9, ngisondezela i-9 e-10 bese ngisusa i-10 e-23 ukuthola i-13; bese ngilungisa impendulo ngokufaka o-1, ngakhoke impendulo i-14.” Ngesikhathi uphinda izindlela zabafundi gcizelela lapho besondezele khona nalapho belungise khona.

Umsebenzi wasekhaya: Ishadi lomsebenzi 1

Ekupheleni kwesifundo sanamuhla nikeza abafundi ishadi lomsebenzi 1.

Akudingeki ukuthi ubekele abafundi isikhathi uma benza lomsebenzi. Inhloso ukunikeza abafundi ukuzilolonga ngokubhalwayo emsebenzini ebebewenza ngekhand.

Support Video

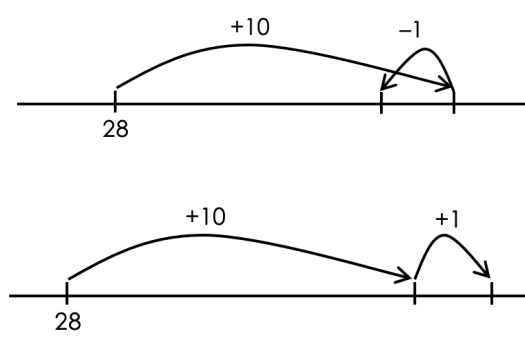
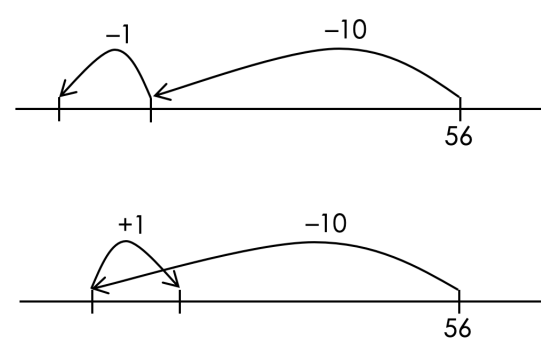
Ukusondezela nokulungisa 4



<https://youtu.be/qyCQU1S6M8w>

Igama:

Ukusondezela nokulungisa: Ishadi lomsebenzi I

<p>1. $46 + 40 = \square$</p>	<p>11. $21 - 3 = \square$</p>
<p>2. $57 - 10 = \square$</p>	<p>12. $28 + 3 = \square$</p>
<p>3. $32 - 3 = \square$</p>	<p>13. $26 + 30 = \square$</p>
<p>4. $71 - 2 = \square$</p>	<p>14. $115 + 50 = \square$</p>
<p>5. $167 - 70 = \square$</p>	<p>15. Phinda a-20 = \square</p>
<p>6. $38 = \square - 2$</p>	<p>16. $19 = \square - 1$</p>
<p>7. $68 + \square = 70$</p>	<p>17. $32 - \square = 30$</p>
<p>8. $99 = 100 - \square$</p>	<p>18. $49 + \square = 50$</p>
<p>9. Phinda a-200 = \square</p>	<p>19. $27 = 30 - \square$</p>
<p>10. Kokelezela ulayini wezinombolo obonisa</p> <p style="text-align: center;">$28 + 9$</p> 	<p>20. Kokelezela ulayini wezinombolo obonisa</p> <p style="text-align: center;">$56 - 9$</p> 

Amanothi kathisha

Lapha ungenza amanothi ngesifundo kanye nokuthi yibaphi abafundi abasadinga ukusizwa ngesu lokuxhumanisa kusetshenziswa ishumi. Ungenza namanothi nganoma iyiphi enye into ofuna ukubhekana nayo/ukuyilungisa esifundweni sokuqalisa esilandelayo.

Support Video

Ukusondezela nokulungisa 5



https://youtu.be/VQ8va_RuHBQ

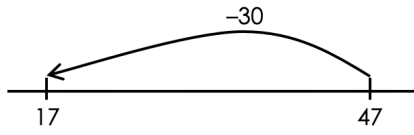
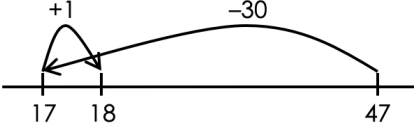
UKUSONDEZELA NOKULUNGISA: ISIFUNDO SOKUQALISA 5

Umzuzu o-1 wokufudumeza ingqondo

- a. Zungeza igumbi nga-20 ngaphansi, nga-30 ngaphansi
- b. I-Pop-Fizz: Isiphindaphindi nge-10 esiseduzane

Ukulandelana komsebenzi

Kulesi sifundo sisebenzisa isu lokusondezela nokulungisa ukususa.

<p>Uthisha: Singalisebenzisa kanjani isu/iqhinga lokusondezela nokulungisa ukuxazulula: $47 - 29$?</p> <p>Uma abafundi bexineka/benengcindezi ukuchaza isu, buza:</p> <p>Uthisha: Iyiphi inombolo enobungani a-29 asondelene nayo?</p> <p>Abafundi: 30</p> <p>Uthisha: Uma sisondezela a-29 e-30 bese sigxumela/seqela emuva nga-30 ukusukela ku-47? Sizoba kuphi?</p> <p>Abafundi: 17 (bonisa lokhu ebhodini)</p> <p>Uthisha: Ngabe i-17 iyona mpendulo yokugcina noma kusafanele silungise?</p> <p>Buza abafundi ukuthi bachaze isidingo sokulungisa impendulo: Sisuse okukodwa okungaphezulu, ngakho kufanele sandise ngokukodwa kwimpendulo ukuthola i-18.</p> <p>Bonisa lokhu kulayini wezinombolo ebhodini.</p> <p>Tshela abafundi ukuthi lendlela isebenza kangcono uma inombolo esusiwe iseduze nenombolo enobungani (inombolo okulula ukusebenza ngayo).</p>	<p style="text-align: right;">$47 - 29$</p>  <p>Hlanganisa kulayini wezinombolo:</p> 
---	---

Imisebenzi yomfundi ngamunye

Manje abafundi kufanele bazame izibonelo ezilandelayo *ngekhandu*:

$28 - 19$ $54 - 39$

Abafundi kufanele bachaze ukucabanga kwabo, isb. “Ngokwa- $28 - 19$, ngisondezela i-19 e-20 bese ngisusa a-20 ku-28 ukuthola i-8; bese ngilungisa impendulo ngokufakela o-1, ngakho impendulo i-9.” Ngesikhathi uphinda izindlela zabafundi gcizelela lapho besondezele nalapho belungise khona.

UKUSONDEZELA NOKULUNGISA: ISIFUNDO SOKUQALISA 6

Umzuzu o-1 wokufudumeza ingqondo

a. I-Pop-Fizz: Kweqiwa kanjani ukuya kusiphindaphindi nge-10 (khetha izinombolo ezinemivo 7, 8 ne-9, isb. $27 \rightarrow 30$; $58 \rightarrow 60$; $49 \rightarrow 50$)

b. Ukubala okusheshayo: Faka o-1, o-2 noma o-3

“Yini a- ...?”

Uthisha: $61 + 2 \rightarrow$ Abafundi: 63

Uthisha: $52 + 3 \rightarrow$ Abafundi: 55

Uthisha: $77 + 1 \rightarrow$ Abafundi: 78

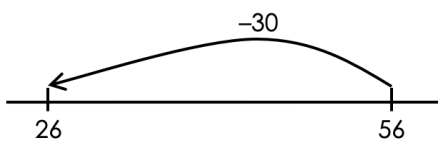
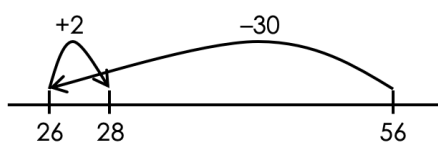
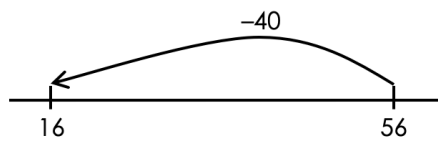
Uthisha: $69 + 2 \rightarrow$ Abafundi: 71

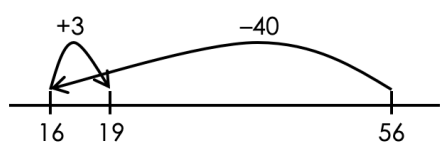
Uthisha: $58 + 3 \rightarrow$ Abafundi: 61

njalo njalo...

Ukulandelana komsebenzi

Kulesi sifundo singenisa isu lokusondezela nokulungisa ukususa.

<p>Uthisha: Uma sisusa a-28 noma a-38 noma a-48 kwinombolo, singayisebenzisa indlela yokusondezela nokulungisa? Singayisebenzisa kanjani ukuxazulula:</p> <p>$56 - 28?$</p> <p>Uma abafundi bexineka/benengcindezi ukuchaza isu, buza:</p> <p>Uthisha: Iyiphi inombolo enobungani a-28 asondelene nayo?</p> <p>Abafundi: 30</p> <p>Uthisha: Uma sisondezela a-28 e-30 bese seqela/sigxumela emuva nga-30 sisukela ku-56? Sizoba kuphi?</p> <p>Abafundi: 26(bonisa lokhu ebhodini)</p> <p>Uthisha: Kufanele siwalungise kanjani a-26?</p> <p>Buza abafundi ukuthi bachaze isidingo sokulungisa impendulo: sisuse okubili okungaphezulu, ngakhoke kufanele sihlanganise lokho okubili kwimpendulo ukuze sithole a-28.</p> <p>Bonisa lokhu kumugqa wezinombolo ebhodini.</p>	<p>$56 - 28$</p>  <p>Hlanganisa kulayini wezinombolo:</p> 
<p>Uthisha: Uma sisusa a-27 noma a-37 noma a-47 kunombolo, singalisebenzisa isu/iqhinga lokusondezela nokulungisa? Singalisebenzisa kanjani ukuxazulula a-56 - 37?</p> <p>Uma abafundi bexineka/benengcindezi ukuchaza isu, buza:</p>	<p>$56 - 37$</p> 

<p>Uthisha: Iyiphi inombolo enobungani a-37 asondelene nayo?</p> <p>Abafundi: 40</p> <p>Uthisha: Uma sisondezela a-37 ku-40 bese sigxumela emuva nga-40 ukusukela ku-56? Sizoba kuphi?</p> <p>Abafundi: 16 (bonisa lokhu ebhodini)</p> <p>Uthisha: Kufanele sililungise kanjani i-16?</p> <p>Buza abafundi ukuthi bachaze isidingo sokulungisa impendulo: sisuse okuthathu okungaphezulu, ngakho kufanele sihlunganise lokho okuthathu kwimpendulo ukuze sithole i-19.</p> <p>Bonisa lokhu kumugqa wezinombolo ebhodini.</p>	<p>Hlanganisa kulayini wezinombolo:</p> 
--	--

Umsebenzi womfundi ngamunye

Manje abafundi kufanele bazame izibonelo ezilandelayo *ngekhandu*:

45 – 18 84 – 48 65 – 27

Abafundi kufanele bachaze ukucabanga kwabo, isb. “Ngokwa-45 – 18, ngisondezela i-18 e-20 bese ngisusa a-20 ku-45 ukuthola a-25; bese ngilungisa impendulo ngokufaka o-2, ngakho impendulo nga-27.” Ngesikhathi uphinda izindlela zabafundi gcizelela lapho besondezele nalapho belungise khona.

Support Video

Ukusondezela nokulungisa 6



<https://youtu.be/kG9NCQ9gBPY>

UKUSONDEZELA NOKULUNGISA: ISIFUNDO SOKUQALISA 7

Umzuzu o-1 wokufudumeza ingqondo

a. I-Pop-Fizz: Isiphindaphindi nge-10 esiseduzane

b. I-Pop-Fizz: Kweqiwa kanjani ukuya kusiphindaphindi nge-10 esiseduzane

Ukulandelana komsebenzi

Kulesi sifundo sisebenzisa isu lokusondezela nokulungisa ekubaleni lapho kunezinombolo ezingaphezulu kweyodwa ezingasondezelwa.

<p>Uthisha: Singasebenzisa ukusondezela nokulungisa uma izinombolo zombili ziseduzane/zisondelene nezinombolo ezinobungani, isb. 19 + 39.</p> <p>Bonisa abafundi indlela yokusondezela nokulungisa ebhodini ukwenza 19 + 39.</p> <p>Ngesikhathi ubhala ebhodini, chaza:</p> <p>Uthisha: Singazisondezela zombili izinombolo ku-20 na-40 bese siyazihlanganisa ukuthola a-60. Songeze ngo-1 enombolweni ngayinye ngakhoke kufanele silungise ngokususa o-2 ku-60 ukuze Sithole a-58.</p> <p><i>Qaphela: Uma silungisa zombili izinombolo, sibonisa lokhu ngesibalo esibhalwayo kunokubonisa kulayini wezinombolo.</i></p>	<p>19 + 39 (sondezela zombili) = 20 + 40 bese uyalungisa – 2 (– 1 ngasinye)</p> <p>= 60 – 2 = 58</p>
<p>Uthisha: Ungakubenzisa kanjani ukusondezela nokulungisa ngokwa 28 + 49?</p> <p>Bonisa abafundi indlela yokusondezela nokulungisa yalokhu kubala ebhodini.</p>	<p>28 + 49 (sondezela zombili) = 30 + 50 bese uyalungisa – 3 (– 2 kanye no – 1)</p> <p>= 80 – 3 = 77</p>
<p>Uthisha: Ungakubenzisa kanjani ukusondezela nokulungisa ngokwa 57 + 59 + 48?</p> <p>Bonisa abafundi indlela yokusondezela nokulungisa yalokhu kubala ebhodini.</p>	<p>57 + 59 + 48 (sondezela zonke)</p> <p>= 60 + 60 + 50 bese uyalungisa – 6 (– 3, – 1, – 2)</p> <p>= 170 – 6 = 164</p>

Imisebenzi yomfundi ngamunye

Manje abafundi kufanele bazame izibonelo ezilandelayo *ngekhandu*:

38 + 29 57 + 28 19 + 19 + 19

Abafundi kufanele bachaze abakucabangayo, isb. “Ngokwa-38 + 29, ngisondezela a-38 e-40 na-29 ku-30 bese ngihlanganisa a-40 na-30 ukuthola a-70, bese ngilungisa impendulo ngokususa o-3, ngakho impendulo nga-67.” Ngesikhathi uphinda izindlela zabafundi gcizelela lapho besondezele nalapho belungise khona.

Uma abafundi behluleka ukuchaza ukusebenza kwabo, bacele bakukhombise indlela yabo ngokubhala (njengoba kukhonjisiwe emsebenzini osebhodini).

Umsebenzi wasekhaya: Ishadi lomsebenzi

Ekupheleni kwesifundo sanamuhla nikeza abafundi ishadi lomsebenzi 2.

Akudingeki ukuthi ubekele abafundi isikhathi uma benza lomsebenzi. Inhloso ukunikeza abafundi ukuzilolonga ngokubhalwayo emsebenzini ebebewenza ngekhanda.

Support Video

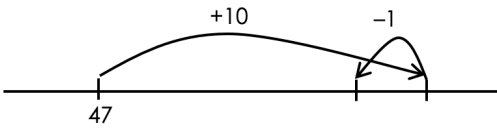
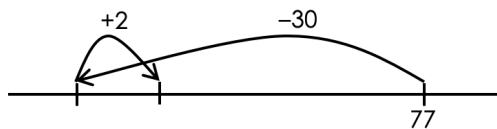
Ukusondezela nokulungisa 7



<https://youtu.be/0TOGmefwNxQ>

Igama:

Ukusondezela nokulungisa: Ishadi lomsebenzi 2

1.	$56 + 29 = \square$				
2.	$54 - 38 = \square$				
3.	$45 + 37 = \square$				
4.	$325 - 99 = \square$				
5.	$47 + 49 + 48 = \square$				
6.	 $47 + \square = 47 + 10 - 1$				
7.	 $77 - 28 = 77 - 30 + \square$				
8.	$66 + 28 = 66 + \square - 2$				
9.	$95 - 39 = 95 - \square + 1$				
10.	<p>Kokelezela umusho wezinombolo onikeza impendulo ef anayo na-:</p> <p style="text-align: center;">$80 - 39$</p> <table style="width: 100%; border: none;"> <tr> <td style="text-align: center;">$80 + 40 - 1$</td> <td style="text-align: center;">$80 + 40 + 1$</td> </tr> <tr> <td style="text-align: center;">$80 - 40 + 1$</td> <td style="text-align: center;">$80 - 40 - 1$</td> </tr> </table>	$80 + 40 - 1$	$80 + 40 + 1$	$80 - 40 + 1$	$80 - 40 - 1$
$80 + 40 - 1$	$80 + 40 + 1$				
$80 - 40 + 1$	$80 - 40 - 1$				

Amanothi kathisha

Lapha ungenza amanothi ngesifundo kanye nokuthi yibaphi abafundi abasadinga ukusizwa ngesu lokuxhumanisa kusetshenziswa ishumi. Ungenza namanothi nganoma iyiphi enye into ofuna ukubhekana nayo/ukuyilungisa esifundweni sokuqalisa esilandelayo.

UKUSONDEZELA NOKULUNGISA: ISIFUNDO SOKUQALISA 8

Umzuzu o-1 wokufudumeza ingqondo

Kuzungezwa igumbi nga-20 ngaphezulu, nga-30 ngaphezulu, nga-30 ngaphansi, nga-40 ngaphansi

Ukulandelana komsebenzi

Kulesi sifundo sikhetha isu elingcono ukulisebenzisa, sisebenzise ukusondezela nokulungisa njengesu ekubaleni okwenza lokhu kube lula.

<p>Bhala amapheya amane ezibalo ebhodini njengoba kukhonjisiwe bese ucela abafundi ukuthi bathi:</p> <ul style="list-style-type: none"> • imaphi abangawasebenzisela isu lokusondezela nokulungisa • imaphi abangasebenzisa isu elihlukile (njengesu lokweqa, ukuxhumanisa besebenzisa ishumi, nokuphinda kabili) <p>Cela abafundi bakunike izizathu ngokukhetha kwabo.</p> <p><i>Qaphela: 99 + 99 enziwe njenge 100 + 100 – 2 ukusebenzisa ukusondezela, ukuphinda kabili (ukuphinda i-100 nga-200) nokulungisa.</i></p> <p>Xoxisana nabafundi ukuthi uma sebazi amasu ahlukene, bayokwazi ukukhetha isu elisheshayo ukusetshenziswa kanti futhi bayokwazi ukuwasebenzisa kanye kanye.</p>	<p>38 + 49</p> <p>22 + 36</p> <p>38 – 13</p> <p>47 – 29</p> <p>29 + 38 + 39</p> <p>14 + 24 + 33</p> <p>99 + 99</p> <p>45 + 45</p>
<p>Buza abafundi ukuthi baxoxe ngokuthi bazokusebenzisa kanjani ukusondezela nokulungisa ukuxazulula lezi:</p> <p>38 + 49</p> <p>47 – 29</p> <p>29 + 38 + 39</p> <p>Abafundi kumele basho okunjengalokhu:</p> <ul style="list-style-type: none"> • sondezela a-38 ku-40 na-49 ku-50, hlanganisa a-40 na-50 ukuthola a-90, bese uyalungisa ngokususa o-3 ku-90. • sondezela a-29 ku-30, susa a-30 ku-47 ukuthola i-17, bese uyalungisa ngokuhlanganisa ubuyisa o-1 ukuthola i-18. • sondezela a-29 ku-30 bese usondezela bobabili a-38 na-39 ku-40, bese uhlanganisa a-30 na-40 na-40 ukuthola i-110 bese ulungisa ngokususa o-4 ukuthola i-106. 	<p>38 + 49</p> <p>47 – 29</p> <p>29 + 38 + 39</p>

<p>Cela abafundi ukuthi baqedele lemisho ngemilomo:</p> <ul style="list-style-type: none"> • Ukuhlanganisa i-18 kunombolo, ngifaka/ngihlanganisa _____ bese ngisusa _____ . • Ukususa i-18 kunombolo, ngisusa _____ bese ngihlanganisa _____ . <p>Cela abafundi ukuthi bagcwalise amabhokisi abhalwe ebhodini njengoba kukhonjisiwe.</p>	<p>Ukuhlanganisa a-38 kupha impendulo efana na: + <input type="checkbox"/> - <input type="checkbox"/></p> <p>Ukususa a-49 kupha impendulo efana na: - <input type="checkbox"/> + <input type="checkbox"/></p> <p>Ukuhlanganisa a-99 kupha impendulo efana na: + <input type="checkbox"/> - <input type="checkbox"/></p> <p>Ukususa a-28 kupha impendulo efana na: - <input type="checkbox"/> + <input type="checkbox"/></p>
--	---

Imisebenzi yomfundi ngamunye

Manje abafundi kufanele bazame izibonelo ezilandelayo *ngekhandu*:

$$29 + 48 \quad 37 - 28 \quad 39 + 28 + 49$$

Abafundi kufanele bachaze abakucabangayo, isb. “Ngokwa-29 + 48, ngisondezela a-29 ku-30 kanye na-48 kuya ku-50 bese ngihlanganisa a-50 na-30 ukuthola a-80, bese ngilungisa impendulo ngokususa o-3, ngakho impendulo nga-57.” Ngesikhathi uphinda izindlela zabafundi gcizelela lapho besondezele nalapho belungise khona.

Uma abafundi behluleka ukuchaza ukusebenza kwabo, bacele bakukhombise indlela yabo ngokubhala.

Support Video

Ukusondezela nokulungisa 8



https://youtu.be/mij_d45rw00

Igama:

Ukusondezela nokulungisa: Isivinyo esandulelayo

INGXENYE I

Imizuzu e-2 kuleli khasi

1. $34 + 20 = \square$

11. $29 + 2 = \square$

2. $42 - 3 = \square$

2. $68 + 10 = \square$

3. $57 - 10 = \square$

3. $38 + 3 = \square$

4. $51 - 2 = \square$

4. $145 + 30 = \square$

5. $178 - 30 = \square$

5. $97 - 60 = \square$

6. $43 + 40 = \square$

6. $48 = \square - 2$

7. $29 = \square - 1$

7. $79 + \square = 80$

8. $37 + \square = 40$

8. phinda a-50 = \square

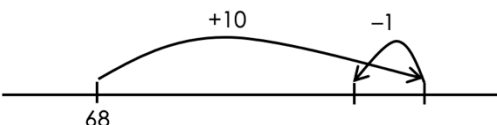
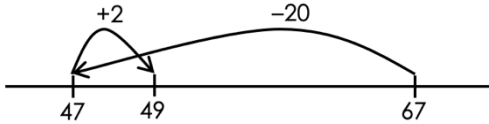
9. $97 = 100 - \square$

9. phinda i-100 = \square

10. $88 + \square = 90$

20. $28 + \square = 30$

Isamba sisuselwa ku-20

Ukusondezela nokulungisa: Isivivinyo esandulelayo					
INGXENYE 2	Imizuzu e-3 kuleli khasi				
1.	$34 + 19 = \square$				
2.	$54 - 29 = \square$				
3.	$27 + 98 = \square$				
4.	$234 - 99 = \square$				
5.	$97 + 98 + 99 = \square$				
6.	 $68 + \square = 68 + 10 - 1$				
7.	 $67 - 18 = 67 - 20 + \square$				
8.	$56 + 28 = 56 + \square - 2$				
9.	$84 - 39 = 84 - \square + 1$				
10.	<p>Kokelezela umusho wezinombolo onikeza impendulo efanayo na-:</p> <p style="text-align: center;">$60 - 29$</p> <table style="width: 100%; border: none;"> <tr> <td style="text-align: center;">$60 - 30 + 1$</td> <td style="text-align: center;">$60 + 30 + 1$</td> </tr> <tr> <td style="text-align: center;">$60 + 30 - 1$</td> <td style="text-align: center;">$60 - 30 - 1$</td> </tr> </table>	$60 - 30 + 1$	$60 + 30 + 1$	$60 + 30 - 1$	$60 - 30 - 1$
$60 - 30 + 1$	$60 + 30 + 1$				
$60 + 30 - 1$	$60 - 30 - 1$				
Isamba sisuselwa e-10					

UKUHLELA KABUSHA

Isingeniso

Izifundo zokuqalisa kulengxenywe zibhekene nokuhlela kabusha *noma* ukuhlela ngenye indlela nangezindlela ezahlukahlukene ekuhleleni kabusha (ukushintsha ukuhleleka kwezombolo ekubaleni) okungenza ukubala ngokuhlanganisa nokuphindaphinda kube lula. Ngokujwayelekile, lokhu kufaka ukuthola inhlanguanisela eyenziwa izinombolo ezinobungani okwenza kube lula ukubala ngazo. Izinombolo ezinobungani, izinombolo okulula ukusebenza ngazo, zijwayele ukufaka iziphindaphindi ngeshumi. Nalapha eminye imisebenzi iholwa nguthisha ebhodini kanti eminye eyabafundi ukuthi bayenze ngabodwana.

Amakhono okukhumbula ngokushesha

Kunamakhono amabili okukhumbula ngokushesha okufanele ukuthi abafundi bawafunde njengesu lokuhlela kabusha/ngenye indlela:

- Ukubona inhlanguanisela yezinombolo ehlanganisayo, noma ekhulisayo, ukwenza iziphindaphindi nge-10 (isb. 6 no-4 noma o-3 ne-7, kodwa futhi i-16 no-4 noma a-32 ne-18)
- Ukubona inhlanguanisela yezinombolo engaphindaphindwa ukwenza iziphindaphindi nge-10 (isb. 2×5 , 5×4).

Igama:

Ukuhlela kabusha: Isivivinyo sangaphambili

INGXENYE I

Imizuzu e-2 kuleli khasi

1. Kokelezela izinombolo ezimbili ezihlanganisa kuye e-10. 7 4 2 3 9	11. $100 + 14 = \square$				
2. Kokelezela izinombolo ezimbili ezihlanganisa kuye e-10. 5 4 1 6 8	12. $2 \times 5 = \square$				
3. $6 + \square = 10$	13. Kokelezela izinombolo ezimbili ezihlanganisa kuye e-20. 8 14 12 3 19				
4. $9 + 11 = \square$	14. Kokelezela izinombolo ezimbili ezihlanganisa kuye e-20. 15 4 1 16 8				
5. Kokelezela izinombolo ezimbili ezihlanganisa kuye e-100. 24 50 30 38 70	15. $50 \times 2 = \square$				
6. Kokelezela izinombolo ezimbili ezihlanganisa kuye e-100. 51 17 29 49 60	16. $140 + \square = 149$				
7. $20 = 8 + \square$	17. Kokelezela izinombolo ezimbili ezihlanganisa kuye e-30. 18 14 12 7 19				
8. $\square + 3 = 20$	18. Kokelezela izinombolo ezimbili ezihlanganisa kuye e-30. 10 14 9 16 13				
9. <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td style="padding: 5px;">21</td><td style="padding: 5px;"><input style="width: 40px; height: 20px;" type="text"/></td></tr><tr><td colspan="2" style="padding: 5px; text-align: center;">30</td></tr></table>	21	<input style="width: 40px; height: 20px;" type="text"/>	30		19. $\begin{array}{r} + \\ 69 \end{array}$ $69 + \square = 100$
21	<input style="width: 40px; height: 20px;" type="text"/>				
30					
10. $56 + 30 = \square$	20. $22 + 18 = \square$				

Isamba sisuselwa ku-20

Ukuhlela kabusha: Isivivinyo sangaphambili	
INGXENYE 2	Imizuzu e-3 kuleli khasi
1.	$6 + 98 = \square$
2.	$17 + 48 + 13 = \square$
3.	$199 + 98 + 1 + 2 = \square$
4.	$37 + 56 + 13 = \square$
5.	$38 + 125 + 15 = \square$
6.	$2 \times 7 \times 5 = \square$
7.	$6 + 98 = 98 + \square$
8.	$96 + 58 + 4 = 100 + \square$
9.	$99 + 97 + 1 + \square = 200$
10.	Kokelezela izinombolo ezimbili ezingcono ukuzihlanganisa kuqala kule sethi: 37 88 12
Isamba sisuselwa e-10	

UKUHLELA KABUSHA: ISIFUNDO SOKUQALISA 1**Umzuzu o-1 wokufudumeza ingqondo**

Ngithi/uthi: Yenza i-10/yenza a-20

a. Uthisha usho inombolo enedijithi elilodwa abese eyalela ukuthi umfundi aphendule ngenombolo ehlanganisa kuleyonombolo ukwenza i-10.

Uthisha: 6 → Umfundi 1: 4
 Uthisha: 3 → Umfundi 2: 7
 Uthisha: 2 → Umfundi 3: 8 njalo njalo...



b. Uthisha usho inombolo phakathi koku-1 nokunga-20 abese eyalela ukuthi umfundi aphendule ngenombolo ehlanganisa kuleyonombolo ukwenza a-20.


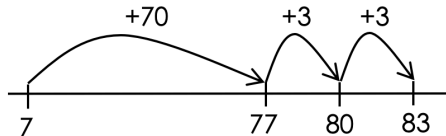
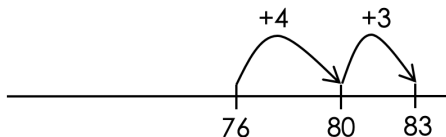
Uthisha: 12 → Umfundi 1: 8
 Uthisha: 13 → Umfundi 2: 7
 Uthisha: 5 → Umfundi 3: 15 njalo njalo ...

Yomibili lemidlalo ingadlalwa ngababili/ipheya. Ekufudumezeni okulandelelayo lomdlalo uyelulwa ukwenza ezinye iziphindaphindi ngeshumi.

Ukulandelana komsebenzi

Kulesi sifundo singenisa isu lokuhlela kabusha.

<p>Sebenzisa iminwe yakho ukukhombisa $5 + 3$ njengoba kukhonjisiwe ngezansi bese ubhala $5 + 3$ ebhodini:</p>  <p>Uthisha: Lapha ngikhombisa iminwe e-5 ne-3 ngaphezulu</p> <p>Phambanisa izandla zakho (buka ngezansi):</p>  <p>Uthisha: Manje la ngine-3 + 5, kodwa ngisabonisa ngeminwe elinganayo/efanayo. Ngakho sibona $5 + 3 = 3 + 5$.</p> <p>Bhala $5 + 3 = 3 + 5$ ebhodini.</p> <p>Yenza ezinye izibonelo ezimbalwa usebenzisa iminwe uphambanisa nezandla zakho, isb.</p> <p>$4 + 1 = 1 + 4$.</p>	<p>Bhala ebhodini: $5 + 3$</p> <p>$5 + 3 = 3 + 5$</p>
---	---

<p>Uthisha: Ngakho uma sihlanganisa izinombolo, ukuhleleka kwezinombolo uma sizihlanganisa akusho lutho.</p>	
<p>Bamba isikhwama esikhulu esandleni esisodwa, nesincane kwesinye.</p>  <p>Uthisha: Manje cabanga ukuthi nginoswidi a-7 kulesi sikhwama (phakamisa isikhwama esincane) noswidi aba-76 kulesi sikhwama (phakamisa isikhwama esikhulu), ngakhoke ngine-7 + 76 woswidi.</p> <p>Phambanisa izandla zakho ngaphambi kokuthi uthi:</p> <p>Uthisha: Manje la ngi-76 + 7, kodwa ngisenenombolo efanayo yoswidi. Ngakho 7 + 76 = 76 + 7.</p>	<p>Bhala ebhodini:</p> $7 + 76 = 76 + 7$
<p>Uthisha: Ngabe kuyashesha ukubala i-7 + 76 noma 76 + 7?</p> <p>Sebenzisa olayini bezinombolo ababili ukukhombisa ukuthi ukuhlanganisa i-7 ku-76 kushesha kakhulu kunokuhlanganisa a-76 ku-7 ngoba kunokweqa/ukugxuma okuncane.</p> <p>Dweba olayini bezinombolo ababili ukukhombisa lokhu.</p> <p><i>Qaphela: Ulayini wezinombolo ukhombisa ukuhlanganisa nge-7 ngokuhlanganisa i-4 ku-76 ukuthola i-80, bese kuhlanganiswa no-3. Abanye abafundi bangakwazi ukusheshisa bahlanganise i-7. Lokhu kuyancomeka/kuhle. Khumbuza abafundi ukuthi bangabali ngakunye.</i></p>	<p>7 + 76</p>  <p>76 + 7</p> 

Imisebenzi yomfundi ngamunye

Yikuphi ukubala okungezansi okufanele kuhlelwe kabusha ngaphambi kokuthi kubalwe? Abafundi bangasebenzisa ulayini wezinombolo ngokusheshayo ukusizakala uma bekudinga.

5 + 46 86 + 6 7 + 68 84 + 9

Abafundi kumele bakhuthazwe ukuchaza ukucabanga kwabo, isb. “ngokwe-5 + 46, ngihlela kabusha ukuze ngithi 46 + 5, bese ngihlanganisa o-4 ukuthola a-46 ukuthola a-50 bese ngihlanganisa o-1 ukuthola a-50 ukuze ngithole a-51.”

Tshela abafundi ukuthi BANGABALI nga-1.

Support Video

Ukuhlela kabusha 1



<https://youtu.be/FIIM2einnNo>

Support Video

Ukuhlela kabusha 2



<https://youtu.be/PdZN9ZWaoDQ>

UKUHLELA KABUSHA: ISIFUNDO SOKUQALISA 2

Umzuzu o-1 wokufudumeza ingqondo

Ukubala okuxhumene (isb. $8 + 2 \rightarrow 10$; $18 + 2 \rightarrow 20$; $28 + 2 \rightarrow 30$)

Uthisha ubhala ukubala kokuqala ebhodini:

$$8 + 2 = 10$$

Uthisha utshela ikilasi ukuthi siyazi ukuthi i-8 sihlanganiswa no-2 silingana ne-10 bese ubuza impendulo ekubaleni okuxhumene. Yalela abafundi ngabanye okufanele baphendule.

Uthisha: $18 + 2 \rightarrow$ Umfundi 1: 20

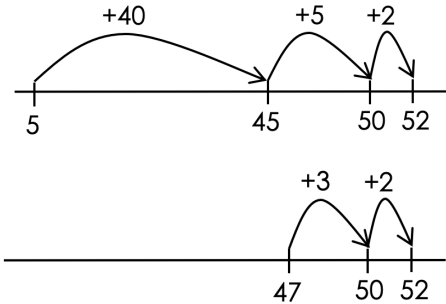
Uthisha: $28 + 2 \rightarrow$ Umfundi 2: 30

Uthisha: $38 + 2 \rightarrow$ Umfundi 3: 40

njalo njalo...

Ukulandelana komsebenzi

Kulesi sifundo sisebenzisa isu lokuhlela kabusha.

<p>Isibalo: $5 + 47$</p> <p>Uthisha: Ukubala $5 + 47$ singaqala ku-5 seqele phambili nga-47, noma singaqala ku-47 seqele phambili ngo-5. Yikuphi okuzoshesha?</p> <p>Dweba olayini bezinombolo ukubonisa zombili izindlela ebhodini uma kunesidingo ukukhombisa ukuthi $47 + 5$ unokweqa/ukugxuma okuncane.</p>	<p>$5 + 47$</p> 						
<p>Uthisha: Manje bheka lokhu kubala. Kubeke ngamaqembu amabili: ukubala lapho sizohlela kabusha ukwenza ngokushesha, nalokho okungahlala njengoba kunjalo.</p>	<p>Bhala:</p> <table style="width: 100%; text-align: center;"> <tbody> <tr> <td>$23 + 9$</td> <td>$15 + 47$</td> <td>$8 + 63$</td> </tr> <tr> <td>$68 + 7$</td> <td>$6 + 93$</td> <td>$57 + 26$</td> </tr> </tbody> </table> <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="border: 1px solid black; border-radius: 50%; width: 60px; height: 60px; display: flex; align-items: center; justify-content: center;"> <p>Hlela kabusha</p> </div> <div style="border: 1px solid black; border-radius: 50%; width: 60px; height: 60px; display: flex; align-items: center; justify-content: center;"> <p>Ungahleli kabusha</p> </div> </div>	$23 + 9$	$15 + 47$	$8 + 63$	$68 + 7$	$6 + 93$	$57 + 26$
$23 + 9$	$15 + 47$	$8 + 63$					
$68 + 7$	$6 + 93$	$57 + 26$					

Umsebenzi womfundi ngamunye

Manje abafundi kufanele basebenzise imidwebo yolayini bezinombolo ukwenza ukubala okulandelayo. Abafundi kufanele babhale ukubala okuhlelwe kabusha, badwebwe ulayini wezinombolo bese bebhala impendulo:

$$8 + 63 \quad 6 + 97$$

Abafundi kumele bakhuthazwe ukuchaza ukucabanga kwabo, isb. “ngokwe-8 + 63, ngihlela kabusha ukuthi ngithi 63 + 8, bese ngihlanganisa i-7 ku-63 ukuthola a-70 bese ngihlanganisa o-1 ku-70 ukuze ngithole a-71.”

Tshela abafundi ukuthi BANGABALI nga-1.

UKUHLELA KABUSHA: ISIFUNDO SOKUQALISA 3**Umzuzu o-1 wokufudumeza ingqondo**

Zungeza igumbi: Yakha izinombolo ezinobungani

Uthisha ubhala imisho yezinombolo ezintathu ezixhumene ebhodini ezenza izinombolo ezinobungani, isb. $7 + 3 = 10$ $17 + 3 = 20$ $37 + 3 = 40$

Uzungeza igumbi, cela abafundi bakuphe eminye imisho yezinombolo ezixhume luleli phethini elakha izinombolo ezinobungani. Bhala izimpendulo zabafundi ebhodini.

Umfundi 1: $47 + 3 = 50$ → Umfundi 2: $87 + 3 = 90$ → Umfundi 3: $107 + 3 = 110$ → njalo njalo.

Abanye abafundi bangathi $17 + 13 = 30$ noma $37 + 23 = 60$. Nalezi zingabhalwa ebhodini.

Ukulandelana komsebenzi

Kulesi sifundo sithola inhlanganisela yezinombolo ezinobungani ukwenza ukubala ngezinzombolo ezintathu kube lula.

<p>Isibalo: $26 + 17 + 4$</p> <p>Uthisha: Singakwenza lokhu kubala ngalolu hlelo, kodwa ngibona inhlanganisela yezinombolo ezinobungani kumusho wezinombolo. Ikuphi “inhlanganisela” yezinombolo ezinobungani?</p> <p>Abafundi: $26 + 4 = 30$</p> <p>Uthisha: A-30 inombolo enobungani. Manje, yini a-$30 + 17$?</p> <p>Abafundi: 47</p> <p>Gqugquzela abafundi ukuthi basebenzise amasu okweqa ngekhandu ukubala lempendulo. Khumbuza abafundi ukuthi BANGABALI nga-1.</p>	<p style="text-align: center;">$26 + 17 + 4$</p> <p style="text-align: center;"> $\begin{array}{r} 26 + 17 + 4 \\ \swarrow \quad \searrow \\ 30 \end{array}$ </p> <p style="text-align: center;">$26 + 17 + 4 = 30 + 17$ $= 47$</p>
<p>Isibalo: $69 + 47 + 3$</p> <p>Uthisha: Thola “inhlanganisela” enobungani kulokhu kubala.</p> <p>Abafundi: $47 + 3 = 50$</p> <p>Uthisha: A-50 inombolo enobungani. Manje-ke, yini a-$69 + 50$?</p> <p>Abafundi: 119</p> <p>Gqugquzela abafundi ukuthi basebenzise amasu okweqa ngekhandu ukuphendula a $69 + 50$. Khumbuza abafundi ukuthi BANGABALI nga-1.</p>	<p style="text-align: center;">$69 + 47 + 3$</p> <p style="text-align: center;"> $\begin{array}{r} 69 + 47 + 3 \\ \swarrow \quad \searrow \\ 50 \end{array}$ </p> <p style="text-align: center;">$69 + 47 + 3 = 69 + 50$ $= 119$</p>

Imisebenzi yomfundi ngamunye

Manje abafundi kumele bazame izibonelo ezilandelayo ngokuqale bathole inhlanganisela yezinombolo ezinobungani bese bebala impendulo:

$$25 + 18 + 5$$

$$44 + 38 + 12$$

$$3 + 65 + 27$$

Abafundi kumele bakhuthazwe ukuchaza ukucabanga kwabo, isb. “ngokwa-25 + 18 + 5, ngiqala ngihlanganise o-5 kokunga-25 ukuthola a-30, bese ngihlanganisa i-18 ku-30 ukuze ngithole a-48.”

Tshela abafundi ukuthi BANGABALI nga-1.

Support Video

Ukuhlela kabusha 3



<https://youtu.be/SdnTj8PZX-o>

Support Video

Ukuhlela kabusha 4



https://youtu.be/F_1UiS4QAQ4

UKUHLELA KABUSHA: ISIFUNDO SOKUQALISA 4

Umzuzu o-1 wokufudumeza ingqondo

Ngithi/uthi: Yenza a-30/Yenza a-50

Ukulandelana komsebenzi

Kulesi sifundo sizilongela ukuthola inhlanganisela yezinombolo ezinobungani phakathi ekubaleni.

<p>Isibalo: $15 + 47 + 5$</p> <p>Uthisha: Namuhla sizofuna inhlanganisela yezinombolo ezinobungani eziningana. Ngabe ikhona inhlanganisela yezinombolo ezinobungani ebhodini?</p> <p>Abafundi: Yebo, $15 + 5 = 20$.</p> <p>Uthisha: Ngakho $20 + 47 =$ yini?</p> <p>Abafundi: 67</p>	$\begin{array}{r} 15 + 47 + 5 \\ \swarrow \quad \searrow \\ 20 \\ 15 + 47 + 5 = 20 + 47 \\ = 67 \end{array}$
<p>Isibalo: $38 + 27 + 12$</p> <p>Uthisha: Thola inhlanganisela yenombolo enobungani.</p> <p>Abafundi: $38 + 12 = 50$.</p> <p>Uthisha: Ngakho $50 + 27 =$ yini?</p> <p>Abafundi: 77</p>	$\begin{array}{r} 38 + 27 + 12 \\ \swarrow \quad \searrow \\ 50 \\ 38 + 27 + 12 = 50 + 27 \\ = 77 \end{array}$
<p>Uthisha: Yiziphi izinombolo ezingangena ebhokisini ukwenza inhlanganisela yezinombolo ezinobungani?</p> <p>Abafundi kufanele banikeze izinombolo ezigcina ngo-2 ukuhlanganisa na-38 ukwenza inombolo enobungani, isb. 2, 32, 82 njalo njalo. Futhi banganikeza izinombolo ezigcina ngo-3 ukuhlanganisa na-27 ukwenza inombolo enobungani, isb. 3, 13, 53 njalo njalo.</p>	$38 + 27 + \square$ $38 + 27 + \boxed{32} \quad 38 + 27 + \boxed{13}$ $38 + 27 + \boxed{2} \quad 38 + 27 + \boxed{53}$

Imisebenzi yomfundi ngamunye

Manje abafundi kufanele babhale izinombolo ezinhlanu ezahlukenene ezingangena ebhokisini ngalinye ukwenza inhlanganisela yenombolo enobungani.

$$24 + 49 + \square \quad 33 + \square + 29$$

Abafundi kumele bakhuthazwe ukuchaza ukucabanga kwabo, isb. “ngokwa- $24 + 49$, ngingabhala inombolo egcina ngo-1 ukuhlanganisa na-49 noma ngingabhala inombolo egcina nge-6 ukuhlanganisa na-24.”

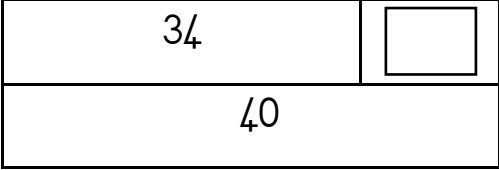
Umsebenzi wasekhaya: Ishadi lomsebenzi 1

Ekupheleni kwesifundo sanamuhla nikeza abafundi ishadi lomsebenzi 1.

Akudingeki ukuthi ubekele abafundi isikhathi uma benza lomsebenzi. Inhloso ukunikeza abafundi ukuzilolonga ngokubhalwayo emsebenzini ebebewenza ngekhanda.

Igama:

Ukuhlela kabusha: Ishadi lomsebenzi I

<p>Kokelezela izinombolo ezimbili ezihlanganisa kuye e-10.</p> <p>1. 8 6 2 7 5</p>	<p>11. $100 + 57 = \square$</p>
<p>Kokelezela izinombolo ezimbili ezihlanganisa kuye e-10.</p> <p>2. 7 5 4 6 9</p>	<p>12. $2 \times 6 = \square$</p>
<p>3. $8 + \square = 10$</p>	<p>13. Kokelezela izinombolo ezimbili ezihlanganisa kuye ku-30.</p> <p>9 16 21 7 12</p>
<p>4. $7 + 13 = \square$</p>	<p>14. Kokelezela izinombolo ezimbili ezihlanganisa kuye ku-30.</p> <p>17 5 13 8 12</p>
<p>5. Kokelezela izinombolo ezimbili ezihlanganisa kuye e-100.</p> <p>36 59 64 45 73</p>	<p>15. $60 \times 2 = \square$</p>
<p>6. Kokelezela izinombolo ezimbili ezihlanganisa kuye e-100.</p> <p>45 87 37 55 62</p>	<p>16. $120 + \square = 128$</p>
<p>7. $20 = 8 + \square$</p>	<p>17. Kokelezela izinombolo ezimbili ezihlanganisa kuye ku-20.</p> <p>11 14 6 7 19</p>
<p>8. $\square + 6 = 20$</p>	<p>18. Kokelezela izinombolo ezimbili ezihlanganisa kuye ku-20.</p> <p>15 12 8 4 11</p>
<p>9. </p>	<p>19. $\begin{array}{r} + \\ 87 \end{array}$</p> <p>$87 + \square = 100$</p>
<p>10. $26 + 12 = \square$</p>	<p>20. $24 + 16 = \square$</p>

Amanothi kathisha

Lapha ungenza amanothi ngesifundo kanye nokuthi yibaphi abafundi abasadinga ukusizwa ngesu lokuxhumanisa kusetshenziswa ishumi. Ungenza namanothi nganoma iyiphi enye into ofuna ukubhekana nayo/ukuyilungisa esifundweni sokuqalisa esilandelayo.

Support Video

Ukuhlela kabusha 5



<https://youtu.be/dz79xkmVQy8>

UKUHLELA KABUSHA: ISIFUNDO SOKUQALISA 5

Umzuzu o-1 wokufudumeza ingqondo

Thola inhlanguanisela yenombolo enobungani

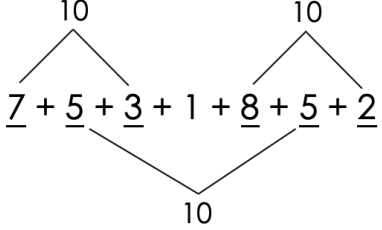
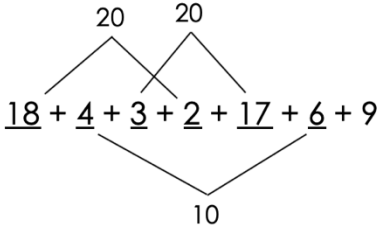
Uthisha ubhala ebhodini:

23 2 8 25 36 17 21 19 44

Uthisha usho noma iyiphi inombolo, isb. 13, abafundi kumele bakhethe noma iyiphi inombolo ebhodini ezoba yinombolo enobungani uma ihlanguaniswe nenombolo, isb. 17 angenza inombolo enobungani ya-30 uma ihlanguaniswe ne-13.

Ukulandelana komsebenzi

Kulesi sifundo sithola inhlanguanisela yezinombolo ezinobungani uma sihlanguanisa izinombolo eziningi.

<p>Isibalo: $7 + 5 + 3 + 1 + 8 + 5 + 2$</p> <p>Uthisha: Thola izinhlanguanisela zezinombolo ezinobungani?</p> <p>Abafundi: $7 + 3 = 10$; $5 + 5 = 10$; $8 + 2 = 10$</p> <p>Maka izinhlanguanisela ebhodini ngesikhathi abafundi bezisho.</p> <p>Uthisha: Ngakho $7 + 5 + 3 + 1 + 8 + 5 + 2$ yi $10 + 10 + 10 + 1$ okunga-31.</p>	<p>$7 + 5 + 3 + 1 + 8 + 5 + 2$</p>  <p>$= 31$</p>
<p>Isibalo: $18 + 4 + 3 + 2 + 17 + 6 + 9$</p> <p>Uthisha: Thola izinhlanguanisela zezinombolo ezinobungani?</p> <p>Abafundi: $18 + 2 = 20$; $4 + 6 = 10$; $3 + 17 = 20$</p> <p>Maka izinhlanguanisela ebhodini ngesikhathi abafundi bezisho.</p> <p>Uthisha: Ngakho $18 + 4 + 3 + 2 + 17 + 6 + 9$ nga $20 + 20 + 10 + 9$ okunga-59</p>	<p>$18 + 4 + 3 + 2 + 17 + 6 + 9$</p>  <p>$= 59$</p>

Imisebenzi yomfundi ngamunye

Manje abafundi kufanele bazame izibonelo ezilandelayo *ngekhanda* ngokuthola izinhlanguanisela zezinombolo ezinobungani bese beyabala:

$6 + 3 + 2 + 4 + 9 + 8$ $27 + 32 + 16 + 3 + 8$

Abafundi kumele bachaze ukucabanga kwabo, isb. “kusibonelo sokuqala, ngihlanguanisa i-6 ko-4 ukuthola i-10, bese ngihlanguanisa o-2 ukuthola i-8 ukuze ngithole i-10, bese ngihlanguanisa o-3 noku-9 ukuthola i-12 ne-10 ngilihlanguanise ne-10 ngilihlanguanise ne-12 nga-32.”

Tshela abafundi ukuthi BANGABALI nga-1.

UKUHLELA KABUSHA: ISIFUNDO SOKUQALISA 6

Umzuzu o-1 wokufudumeza ingqondo

I-Pop-Fizz: Phindaphinda ngo-5

Uthisha uthi 'pop' abafundi bathi 'fizz'; bese uthisha esho inombolo, abafundi baphendule ngaleyo nombolo iphindaphindwe ka 5.

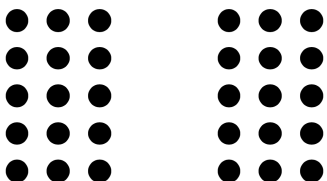
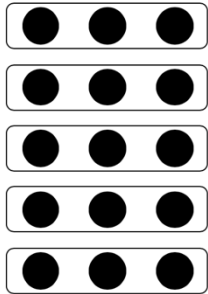
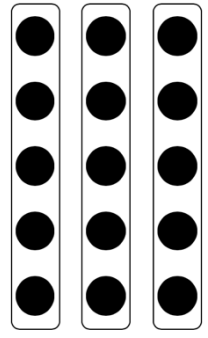
Uthisha: pop	→	Abafundi: fizz	
Uthisha: 2	→	Abafundi: 10	
Uthisha: pop	→	Abafundi: fizz	
Uthisha: 3	→	Abafundi: 15	
Uthisha: pop	→	Abafundi: fizz	
Uthisha: 8	→	Abafundi: 40	
Uthisha: pop	→	Abafundi: fizz	
Uthisha: 9	→	Abafundi: 45	njalo njalo...

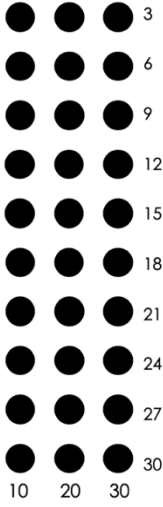
Lomdlalo ungadlalwa ukuzilolongela noma yiliphi ithebula lokiphindaphinda. Ekuqaleni komdlalo, uthisha kumele nje acacise ukuthi iyiphi inombolo abafundi okufanele baphindaphinde ngayo.

Ukulandelana komsebenzi

Kulesi sifundo singenisa ukuhlela kabusha ekuphindaphindeni.

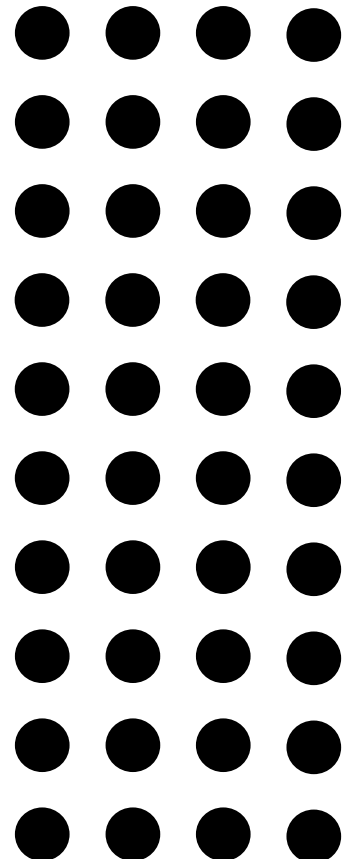
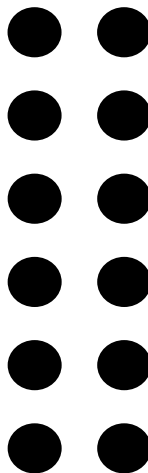
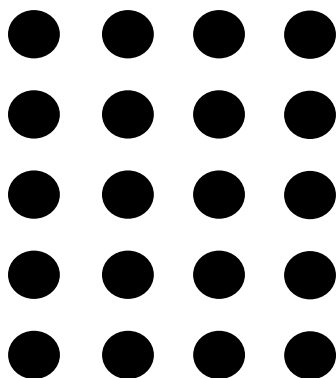
Qaphela: Imihele yamachashazi nama kholomu ayatholakala ebhukwini iPrint Master.

<p>Namathisela izingcezu zamaphepha amabili anolayini aba-5 bamachashazi ama-3 kubhodi. Thola abafundi ukuthi bavumelane ngokuthi kuyafana.</p>  <p>Kusetshenziswa ucezu lokuqala lwephepha, cacisa ukuthi sinenqwaba e-5 yoku-3 ngokukokelezela umugqa ngamunye, bese ubhala 5 x 3 ebhodini.</p> <p>Uthisha: Sekuphelele, siyabona ukuthi kuno 3, 6, 9, 12, 15. (khomba kumugqa ngamunye ngenkathi ubala)</p> <p>Kusetshenziswa ucezu lwesibili lwephepha ngemihla emi 5 koku 3, cacisa ukuthi sinenqwaba e 3 yoku 5 ngokukokelezela ikholomu ngayinye bese ubhala 3 x 5.</p> <p>Uthisha: Sekuphelele, siyabona ukuthi kuno 5, 10, 15 (khomba kukholomu ngayinye ngenkathi ubala). Ngakho sibona 5 x 3 = 3 x 5. Njengoba kade senza sihlanganisa,</p>	 <p>5 x 3</p>  <p>3 x 5</p> <p>5 x 3 = 3 x 5</p>
---	--

singashintsha siphindaphinda.	ukuhleleka uma
<p>Namathisela phezulu ucezu lwephepha olunolayini aba-10 aba-3.</p> <p>Uthisha: Asibale ukuthi mangaka amachashazi alapha esephelele (ukhomba olayini).</p> <p>Abafundi: 3, 6, 9, 12, 15, 18, 21, 24, 27, 30.</p> <p>Uthisha: Asiphambanise ukuhleleka sibale siya le (ukhomba amakholomu).</p> <p>Abafundi: 10, 20, 30</p> <p>Uthisha: Ngabe bekushesha ukubala konke lokhu (ubhekise kuziphindaphindi ngo-3) noma asibale lezi (ubhekise kuziphindaphindi nge-10)?</p> <p>Abafundi kumele bavumelane ukuthi kulula futhi kuyashesha ukwenza i-10, a-20, a-30.</p>	

Umsebenzi yomfundi ngamunye

Manje abafundi kufanele babhale ukubala kokuphindaphinda okubili okungenziwa ukubala inombolo yamachashazi esithombeni ngasinye esingezansi. Abafundi kumele bazikhethele ukuthi ikuphi ukubala okulula ukuthi bakwenze bona. Lezi zihla zamachashazi zisebhukwini le Print Master kanti zingasetshenziswa ebhodini.



Support Video

Ukuhlela kabusha 6



<https://youtu.be/cCVo9O9ibaE>

Support Video

Ukuhlela kabusha 7



<https://youtu.be/ZMaAhLcdAQo>

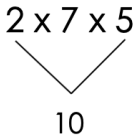
UKUHLELA KABUSHA: ISIFUNDO SOKUQALISA 7

Umzuzu o-1 wokufudumeza ingqondo

i-Pop-Fizz: Phindaphinda nge-10

Ukulandelana komsebenzi

Kulesi sifundo sithola inhlanguanisela yezinombolo ezinobungani phakathi kokubala siphindaphinda ngezinombolo ezintathu.

<p>Isibalo: $2 \times 7 \times 5$</p> <p>Uthisha: Singenza lokhu kubala ngalolu hlelo, kodwa ngibona inhlanguanisela yezinombolo ezinobungani. Ikuphi “inhlanguanisela” yezinombolo ezinobungani?</p> <p>Abafundi: $2 \times 5 = 10$</p> <p>Uthisha: I-10 inombolo enobungani. Asiyisebenzise ukwenza isibalo.</p> <p>bhala $2 \times 7 \times 5 = 2 \times 5 \times 7$ ebhodini.</p> <p>Uthisha: Siyazi $2 \times 5 = 10$. Yini i-10×7?</p> <p>Lalela ukuze uzwe abafundi abazi lempendulo, noma okwazi ukubala ngokweqa nga-10. Khumbuza abafundi ukuthi BANGABALI nga-1.</p> <p>Abafundi: 70</p>	 $2 \times 7 \times 5$ 10 $2 \times 7 \times 5 = 10 \times 7$ $= 70$
---	--

Imisebenzi yomfundi ngamunye

Manje abafundi kufanele basebenzise izinhlanguanisela zezinombolo ezinobungani ukuphendula izibalo ezilandelayo:

$$2 \times 6 \times 5 \quad 5 \times 8 \times 2 \quad 9 \times 2 \times 5$$

Abafundi kumeme bachaze ukucabanga kwabo, isb. “ngokwe- $2 \times 6 \times 5$, ngiyazi o-2 kuphindaphindwe ka-5 yishumi, kanti i-10 liphindaphindwe nge-6 nga-60, ngakhoke impendulo nga-60.”

Qaphela: Abafundi bangaqhamuka nezinye izindlela zokwenza lokhu ngokushesha. Isibonelo, umfundi angenza $2 \times 6 \times 5$ ngokuthi athi $6 \times 5 = 30$ abese ephinda kabili a-30 nga-60. Nalokhu kubala kufanelekile.

Umsebenzi wasekhaya: Ishadi lomsebenzi 2

Ekupheleni kwesifundo sanamuhla nikeza abafundi ishadi lomsebenzi 2.

Akudingeki ukuthi ubekele abafundi isikhathi uma benza lomsebenzi. Inhloso ukubanikeza ithuba lokuzilolonga ngokubhalwayo emsebenzini ebebewenza ngekhanda.

Igama:

Ukuhlela kabusha: Ishadi lomsebenzi 2

1.	$8 + 94 = \square$
2.	$11 + 27 + 19 = \square$
3.	$99 + 198 + 2 + 1 = \square$
4.	$48 + 23 + 12 = \square$
5.	$56 + 115 + 25 = \square$
6.	$2 \times 9 \times 5 = \square$
7.	$3 \times 10 = 10 \times \square$
8.	$9 + 93 = 93 + \square$
9.	$91 + 37 + 9 = 100 + \square$
10.	$99 + 96 + 1 + \square = 200$
11.	Kokelezela izinombolo ezimbili ezingcono ukuhlangeriswa kuqala kule sethi: 74 26 83
12.	Kokelezela izinombolo ezimbili ezingcono ukuphindaphindwa kuqala kule sethi: 2 38 5

Amanothi kathisha

Lapha ungenza amanothi ngesifundo kanye nokuthi yibaphi abafundi abasadinga ukusizwa ngesu lokuxhumanisa kusetshenziswa ishumi. Ungenza namanothi nganoma iyiphi enye into ofuna ukubhekana nayo/ukuyilungisa esifundweni sokuqalisa esilandelayo.

Support Video

Ukuhlela kahle 8



<https://youtu.be/Sh0e84cPf2U>

UKUHLELA KABUSHA: ISIFUNDO SOKUQALISA 8**Umzuzu o-1 wokufudumeza ingqondo**

I-Pop-Fizz: Phindaphinda ngo-5

I-Pop-Fizz: Phindaphinda nge-10

Ukulandelana komsebenzi

Kulesi sifundo sithola inhlanganisela yezinombolo ezinobungani phakathi kokubala siphindaphinda.

<p>Isibalo: $4 \times 9 \times 5$</p> <p>Uthisha: Singenza lokhu kubala ngalolu hlelo, kodwa ngibona inhlanganisela yenombolo enobungani. Ikuphi "inhlanganisela" yenombolo enobungani?</p> <p>Abafundi: $4 \times 5 = 20$</p> <p>Uthisha: A-20 inombolo enobungani. Asisebenzise lokho ukuhlela kabusha isibalo/ukubala.</p> <p>Bhala $4 \times 9 \times 5 = 4 \times 5 \times 9$ ebhodini.</p> <p>Uthisha: Singahlela kabusha sibhale lokhu njengo $4 \times 5 \times 9$. Siyazi $4 \times 5 = 20$. Asithole 20×9 ngokubala nga-20.</p> <p>Abafundi: 20, 40, 60, 80, 100, 120, 140, 160, 180.</p>	<div style="text-align: center;"> $\begin{array}{c} 4 \times 9 \times 5 \\ \swarrow \quad \searrow \\ 20 \end{array}$ </div> $\begin{aligned} 4 \times 9 \times 5 &= 4 \times 5 \times 9 \\ &= 20 \times 9 \\ &= 180 \end{aligned}$
--	---

Imisebenzi yomfundi ngamunye

Manje abafundi kufanele basebenzise izinhlanganisela zezinombolo ezinobungani ngokuhlela kabusha ukuphendula izibalo ezilandelayo:

$$4 \times 3 \times 5 \quad 4 \times 6 \times 5 \quad 5 \times 7 \times 4$$

Abafundi kumeme bachaze ukucabanga kwabo, isb. "ngoko $4 \times 3 \times 5$, ngiyazi o-4 kuphindaphindwe ka-5 ngamashumi amabili, na-20 ephindaphindwe ka-3 nga-60, ngakho impendulo nga-60."

Qaphela: Abafundi bangaqhamuka nezinye izindlela zokwenza lokhu ngokushesha. Isibonelo, umfundi angenza $4 \times 3 \times 5$ ngokuthi $4 \times 3 = 12$ ne- $12 \times 5 = 60$. Nalokhu kusengokubala okufanelekile.

Igama:

Ukuhlela kabusha: Isivivinyo esandulelayo

INGXENYE I

Imizuzu e-2 kuleli khasi

1. Kokelezela izinombolo ezimbili ezihlanganisa kuye e-10. 7 4 2 3 9	11. $100 + 32 = \square$				
2. Kokelezela izinombolo ezimbili ezihlanganisa kuye e-10. 5 4 1 6 8	12. $2 \times 5 = \square$				
3. $7 + \square = 10$	13. Kokelezela izinombolo ezimbili ezihlanganisa kuye e-20. 8 14 12 3 19				
4. $9 + 11 = \square$	14. Kokelezela izinombolo ezimbili ezihlanganisa kuye e-20. 15 4 1 16 8				
5. Kokelezela izinombolo ezimbili ezihlanganisa kuye e-100. 24 50 30 38 70	15. $50 \times 2 = \square$				
6. Kokelezela izinombolo ezimbili ezihlanganisa kuye e-100. 51 17 29 49 60	16. $140 + \square = 149$				
7. $20 = 8 + \square$	17. Kokelezela izinombolo ezimbili ezihlanganisa kuye e-30. 18 14 12 7 19				
8. $\square + 3 = 20$	18. Kokelezela izinombolo ezimbili ezihlanganisa kuye e-30. 10 14 9 16 13				
9. <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td style="padding: 5px;">21</td><td style="padding: 5px;"><input style="width: 40px; height: 20px;" type="text"/></td></tr><tr><td colspan="2" style="padding: 5px; text-align: center;">30</td></tr></table>	21	<input style="width: 40px; height: 20px;" type="text"/>	30		19. $\begin{array}{r} + \\ 69 \end{array} \overline{\hspace{2cm}}$ $69 + \square = 100$
21	<input style="width: 40px; height: 20px;" type="text"/>				
30					
10. $56 + 30 = \square$	20. $22 + 18 = \square$				

Isamba sisuselwa ku-20

Ukuhlela kabusha: Isivivinyo esandulelayo	
INGXENYE 2	Imizuzu e-3 kuleli khasi
1.	$8 + 97 = \square$
2.	$27 + 48 + 23 = \square$
3.	$199 + 98 + 1 + 2 = \square$
4.	$37 + 56 + 13 = \square$
5.	$38 + 125 + 15 = \square$
6.	$2 \times 7 \times 5 = \square$
7.	$8 + 97 = 97 + \square$
8.	$96 + 58 + 4 = 100 + \square$
9.	$99 + 97 + 1 + \square = 200$
10.	Kokelezela izinombolo ezimbili ezingcono ukuhlanganiswa kuqala kule sethi: 43 36 14
Isamba sisuselwa e-10	

UKUXHUMANISA UKUHLANGANISA NOKUSUSA

Isingeniso

Okugxilwe kukho ezifundweni zokuqalisa ubudlelwano phakathi kokuhlanganisa nokususa. Sisebenzisa lobu budlelwano ukuguqula ukubala kusukela ekuhlanganiseni siye ekususeni, kanye nokususa siya ekuhlanganiseni njengesu lokubala. Lokhu kufaka ukuqonda lobu budlelwano phakathi kwalezi zimpawu kanye nokuqonda ubudlelwano Phakathi kwezinombolo ekuhlanganiseni kanye nemisho yezibalo zokususa. Eminye imisebenzi iholwa nguthisha ebhodini kanti eminye eyabafundi ukuthi bayenze ngabodwana.

Amakhono okukhumbula ngokushesha

Mathathu amakhono okukhumbula ngokushesha okudingeka ukuthi abafundi bawafunde ngobudlelwano phakathi kokuhlanganisa nokususa njengesu lokubala:

- Ukuhlanganisa izinombolo ezinedijithi elilodwa ezinombolweni ezinamadijithi amabili, kuhlangisa ukuxhumanisa kusetshenziswa amashumi (isb. 28 + 4; 39 + 2)
- Ukususa izinombolo ezinedijithi elilodwa ezinombolweni ezinamadijithi amabili, kuhlangisa ukuxhumanisa kusetshenziswa amashumi (isb. 33 – 5; 52 – 4)
- Ukusebenza ngolozolo nakalula ngama bha dayagramu ukubona ukuthi ikuphi ukubala okungaxazululeka kalula.

Igama:

Ukuxhumanisa ukuhlanganisa nokususa: Isivivinyo sangaphambili

INGXENYE I

Imizuzu e-2 kuleli khasi

<p>1. $88 + \square = 92$</p>	<p>Gcwalisa nge 15, 5 nama 20 kumisho yezinombolo ngezansi (11-14).</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td style="padding: 5px;">15</td> <td style="padding: 5px;">5</td> </tr> <tr> <td colspan="2" style="text-align: center; padding: 5px;">20</td> </tr> </table>	15	5	20			
15	5						
20							
<p>2. $42 - 4 = \square$</p>	<p>11. $\square - 5 = \square$</p>						
<p>3. $86 + 5 = \square$</p>	<p>12. $\square + 5 = \square$</p>						
<p>4. $17 + \square = 23$</p>	<p>13. $\square - \square = 5$</p>						
<p>5. $199 + \square = 201$</p>	<p>14. $5 + \square = \square$</p>						
<p>Gcwalisa lezi nombolo ezintathu emabhokisini afanele: $11 - 9 = 2$.</p> <table border="1" style="width: 100%; height: 100%;"> <tr> <td style="width: 33%; height: 40px; vertical-align: middle; text-align: center;">\square</td> <td style="width: 33%; height: 40px; vertical-align: middle; text-align: center;">\square</td> <td style="width: 33%; height: 40px; vertical-align: middle; text-align: center;">\square</td> </tr> <tr> <td style="width: 33%; height: 40px; vertical-align: middle; text-align: center;">\square</td> <td style="width: 33%; height: 40px; vertical-align: middle; text-align: center;">\square</td> <td style="width: 33%; height: 40px; vertical-align: middle; text-align: center;">\square</td> </tr> </table>	\square	\square	\square	\square	\square	\square	<p>15. $99 + \square = 102$</p>
\square	\square	\square					
\square	\square	\square					
<p>6. \square</p>	<p>16. $21 - \square = 19$</p>						
<p>7. \square</p>	<p>17. $37 + 6 = \square$</p>						
<p>8. $302 - 5 = \square$</p>	<p>18. $47 + \square = 55$</p>						
<p>9. $29 + \square = 34$</p>	<p>19. $34 - \square = 29$</p>						
<p>10. $91 - \square = 89$</p>	<p>20. $75 + \square = 82$</p>						
<p>Isamba sisuselwa ku-20</p>							

Ukuxhumanisa ukuhlanganisa nokususa: Isivivinyo sangaphambili					
INGXENYE 2	Imizuzu e-3 kuleli khasi				
1.	$92 - 88 = \square$				
2.	$4 + \square = 402$				
3.	$\square - 82 = 5$				
4.	$82 - 75 = \square$				
5.	$201 - 199 = \square$				
6.	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 20%; height: 30px; vertical-align: middle;">\square</td> <td style="text-align: right; vertical-align: middle;">99</td> </tr> <tr> <td colspan="2" style="text-align: center; height: 30px; vertical-align: middle;">102</td> </tr> </table>	\square	99	102	
\square	99				
102					
7.	$27 + 15 = 42$ $42 + 15 = 57$ $42 - 15 = \square$				
8.	$24 + 42 = 66$ $24 + 18 = 42$ $\square + 24 = 42$				
<p>Sebenzisa izinombolo ezintathu ezingezansi ukwenza ukubala ngokususa okubili okwahlukene:</p> <p>$83 + 37 = 120$</p>					
9.	$\square - \square = \square$				
10.	$\square - \square = \square$				
Isamba sisuselwa e-10					

UKUXHUMANISA UKUHLANGANISA NOKUSUSA: ISIFUNDO SOKUQALISA 1

Umzuzu o-1 wokufudumeza ingqondo

Ukuhlanganisa okusheshayo: izinombolo ezinedijithi e-1 nezinombolo ezinamadijithi a-2

Khetha inombolo enamadijithi a-2 bese ucela abafundi bahlanganise ngezinombolo ezehlukene ezinedijithi e-1 kuyona.

Uthisha: 29 + 4 → Abafundi: 33
 Uthisha: 29 + 2 → Abafundi: 31
 Uthisha: 29 + 5 → Abafundi: 34
 Uthisha: 29 + 7 → Abafundi: 36 njalo njalo...

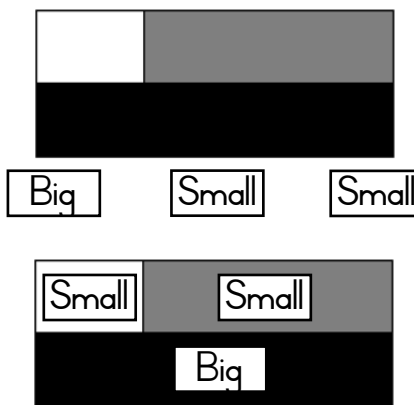
Uthisha: 37 + 5 → Abafundi: 42
 Uthisha: 37 + 9 → Abafundi: 46
 Uthisha: 37 + 6 → Abafundi: 43
 Uthisha: 37 + 3 → Abafundi: 40 njalo njalo ...

Qaphela: Abafundi bangabala behla noma benyuka ngokushesha uma behlanganisa noma besusa 2, 3, noma 4, kodwa kumele bagqugquzelelwe ukuthi basebenzisa isu lokuxhumanisa besebenzisa ishumi ukuhlanganisa nokususa 5, 6, 7, 8, ne 9 besebenzisa isithombe sengqondo somugqa/ulayini wezinombolo.

Ukulandelana komsebenzi

Kulesi sifundo sisebenzisa ama bha dayagramu ukuxhumanisa ukuhlanganisa nokususa.

Qaphela: Ibha dayagramu emnyama, empunga nemhlophe iyatholakala ebhukwini i Print Master.

<p>Uthisha: Ku bha dayagramu yomndeni, amabha amabili amancane alingana nebha eyodwa enkulu. Uma sibuka osayizi abahlukene bemibala kuma bha (emhlophe, empunga ne mnyama) siyabona ukuthi ubude bama bha a-2 amancane ehlangenen alingana nobude be bha enkulu.</p> <p>Uthisha: Sibiza enkulu kakhulu (emnyama) bha 'Big' (namathisela ilebula 'Kukhulu' kwi bha emnyama), bese sibiza lawa amabha amabili amancane 'Kuncane' (namathisela amalebula 'Kuncane' kuma bha amancane).</p> <p>Uthisha: Ubude 'Bokukhulu bulingana Nokuncane sihlanganisa Nokuncane'</p> <p>Bhala ukubala ebhodini.</p>	<p>Namathisela ibha dayagramu engezansi ebhodini bese unamathisela amagama (Kukhulu, Kuncane, Kuncane) ngezansi komdwebo.</p>  <p>Kukhulu = Kuncane + Kuncane</p>
---	---

<p>Uthisha: Nginikeni eminye imisho yokuhlanganisa nokususa nge bha dayagramu?</p> <p>Abafundi: Kukhulu – Kuncane = Kuncane, njll.</p> <p>Bhala okushiwo abafundi, ngakunye ngesikhathi, ubuza ikilasi ukuthi liyavuma noma liyaphika yini (bepha izizathu).</p> <p>Uthisha: Nithini ngo 'Kuncane – Kukhulu = Kuncane'? (kubhale)</p> <p>Abafundi bayasho ukuthi lomusho uyiqino noma akulona iqiniso. Cela abafundi ukuthi basho izizathu.</p> <p>Dweba ulayini onqamula imisho ikilasi elivumelana ukuthi akulona iqiniso (noma ayilungile/ayifanele). Bhala 'akulona iqiniso' eduze kwawo.</p> <p>Yenza okufanayo ngo 'Kuncane + Kukhulu = Kuncane'</p>	<p>Kukhulu – Kuncane = Kuncane Kuncane + Kuncane = Kukhulu</p> <p>Kuncane – Kukhulu = Kuncane?</p> <p>Kuncane – Kukhulu = Kuncane akulona iqiniso</p> <p>Kuncane + Kukhulu = Kuncane akulona iqiniso</p>
--	--

Imisebenzi yomfundi ngamunye

Manje abafundi kufanele bazame umsebenzi onikeziwe esifundweni sokuqalisa 1.

Support Video

Ukuxhumanisa ukuhlanganisa nokususa 1



<https://youtu.be/nha592FZEAc>

Ukuxhumanisa ukuhlanganisa nokususa Isifundo sokuqalisa 1: Umsebenzi womfundi ngamunye

Bhala amagama Kukhulu, Kuncane kanye no Kuncane eduzane namabha afanele emdwebweni ongezansi:

3	6
9	

Beka uphawu (✓) eduzane nomusho wezinombolo ofanele kanti umusho wezinombolo ongalona iqiniso uzoba ne (X):

- | | |
|-------------|-------------|
| $3 + 6 = 9$ | $6 - 3 = 9$ |
| $9 = 6 + 3$ | $9 - 3 = 6$ |
| $6 + 9 = 3$ | $3 = 9 - 6$ |
| $6 + 3 = 9$ | $9 - 6 = 3$ |
| $3 + 9 = 6$ | $3 - 6 = 9$ |

UKUXHUMANISA UKUHLANGANISA NOKUSUSA: ISIFUNDO SOKUQALISA 2

Umzuzu o-1 wokufudumeza ingqondo

Ukususa okusheshayo: izinombolo ezinedijithi e-1 ezinombolweni ezinamadijithi a-2

Khetha inombolo enamadijithi a-2 ucele abafundi ukuthi basuse ngedijithi e-1 ehlukile kuyona.

- Uthisha: 71 – 1 → Abafundi: 70
- Uthisha: 71 – 3 → Abafundi: 68
- Uthisha: 71 – 5 → Abafundi: 66
- Uthisha: 71 – 7 → Abafundi: 64 njalo njalo...

- Uthisha: 42 – 2 → Abafundi: 40
- Uthisha: 42 – 4 → Abafundi: 38
- Uthisha: 42 – 6 → Abafundi: 36
- Uthisha: 42 – 9 → Abafundi: 33 njalo njalo...

Ukulandelana komsebenzi

Kulesi sifundo sikhombisa ubudlelwano bokuhlanganisa nokususa Phakathi kwezinombolo eziyizinombolo zomndeni.

<p>Uthisha: Ungakwazi ukucabanga ukuthi izinombolo 4, 6 ne 10 zingaxhunyaniswa kanjani?</p> <p>Abafundi bangabeka umbono wobuhlobo obunjenga ‘okune nokuyisithupha yishumi’, noma ‘uma sisusa okune kokuyishumi sithola isithupha’, noma ‘4 + 6 = 10’ noma ‘10 – 4 = 6’.</p> <p>Bhala okushiwo abafundi, ngakunye ngesikhathi, ubuza ikilasi ukuthi liyavuma noma liyaphika yini (nezizathu). Susa imibono engelona iqiniso/engafanele.</p> <p>Uthisha: Izinombolo 4, 6 ne 10 ziyaxhumana uma sihlanganisa noma sisusa. Zingabonwa njenge zinombolo zomndeni. Ku bha dayagramu yezinombolo zomndeni, izinomboloezimbili ezincane zihlangene ziwu sayizi olinganayo nenombolo enkulu. Lapha, ubude be-4 + 6 (okuncane okubili emndenini) kulingana nobude be-10 (okukhulu emndenini).</p> <p>Dweba i bha dayagramu.</p> <p>Uthisha: Ezinye izinombolo ezixhumene uma sihlanganisa noma sisusa yi 8, 3 ne 5. Lezi zinombolo nazo yizinombolo</p>	<p>Bhala 4, 6 ne 10 ebhodini.</p> <p style="text-align: center;">4 6 10</p> <p>okune nokuyisithupha kwenza ishumi</p> <p>ishumi lisusa isithupha lilingana nokune</p> <p>4 + 6 = 10</p> <p>6 + 4 = 10</p> <p>10 – 6 = 4</p> <p>10 – 4 = 6</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td style="padding: 5px;">4</td> <td style="padding: 5px;">6</td> </tr> <tr> <td colspan="2" style="text-align: center; padding: 5px;">10</td> </tr> </table>	4	6	10	
4	6				
10					

<p>zomndeni. Zixhumana kanjani lezi zinombolo ku bha dayagramu?</p> <p>Dweba i bha dayagramu engenalutho njengoba kukhonjisiwe.</p> <p>Abafundi bapha imibono yokuxhumana phakathi kwe 8, 3 ne 5 nokuthi inombolo ngayinye kumele iye kuphi ku bha dayagramu.</p> <p>Bhala imibono/okutshelwa ngabafundi njengaphambilini. Qopha okunikeziwe okuvunyiwe kuma kholomu amabili. Kungadingeka ukuthi ulekelele abafundi ngokokugcina kumakholomu amabili okugcina ngokusebenzisa amafreyimu kanje:</p> <p>$8 = \square + \square$; $3 = \square - \square$; $5 = \square - \square$</p> <p>Uthisha: Ngezinombolo zomndeni ngazinye zingenza imisho yezinombolo yokuhlanganisa e-4 nokususa o-4. Ake sibuyele emuva kusibonelo sethu sibone ukuthi akukho yini esikushiyile.</p> <p>Qopha ubhale imisho yezinombolo yokwe 8, 3 ne 5 abeshiyiwe.</p>	<p>Bhala 8, 3 ne 5 ebhodini.</p> <p style="text-align: center;">8 3 5</p> <div style="border: 1px solid black; width: 100%; height: 40px; margin: 10px 0;"></div> <table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <thead> <tr> <th style="padding: 5px;">+</th> <th style="padding: 5px;">-</th> </tr> <tr> <th style="padding: 5px;">ukubala</th> <th style="padding: 5px;">ukubala</th> </tr> </thead> <tbody> <tr> <td style="padding: 5px;">$5 + 3 = 8$</td> <td style="padding: 5px;">$8 - 3 = 5$</td> </tr> <tr> <td style="padding: 5px;">$3 + 5 = 8$</td> <td style="padding: 5px;">$8 - 5 = 3$</td> </tr> <tr> <td style="padding: 5px;">$8 = 5 + 3$</td> <td style="padding: 5px;">$5 = 8 - 3$</td> </tr> <tr> <td style="padding: 5px;">$8 = 3 + 5$</td> <td style="padding: 5px;">$3 = 8 - 5$</td> </tr> </tbody> </table>	+	-	ukubala	ukubala	$5 + 3 = 8$	$8 - 3 = 5$	$3 + 5 = 8$	$8 - 5 = 3$	$8 = 5 + 3$	$5 = 8 - 3$	$8 = 3 + 5$	$3 = 8 - 5$
+	-												
ukubala	ukubala												
$5 + 3 = 8$	$8 - 3 = 5$												
$3 + 5 = 8$	$8 - 5 = 3$												
$8 = 5 + 3$	$5 = 8 - 3$												
$8 = 3 + 5$	$3 = 8 - 5$												

Umsebenzi womfundi ngamunye

Abafundi kumele basebenze nophathini badweba i bha dayagramu yezinombolo zomndeni 7, 9 ne 16. Kufanele bese bebhala ukubala o-4 kokuhlanganisa no-4 kokususa ngokwezinombolo zomndeni.

Hamba ubheka noma uhlola ukusebenza kwamapheya usiza lapho kunesidingo khona.

Support Video

Ukuxhumanisa ukuhlanganisa nokususa 2



<https://youtu.be/fKPfCfF0w1l>

UKUXHUMANISA UKUHLANGANISA NOKUSUSA: ISIFUNDO SOKUQALISA 3

Umzuzu o-1 wokufudumeza ingqondo

- Ukuhlanganisa okusheshayo: izinombolo ezinedijithi e-1 nezinamadijithi a-2
- Ukususa okusheshayo: izinombolo ezinedijithi e-1 kuzinombolo ezinamadijithi a-2

Ukulandelana komsebenzi

Kulesi sifundo sizilolongela ukuxhumanisa ukuhlanganisa nokususa sisebenzisa ama bha dayagramu.

<p>Uthisha: Izinombolo 17, 5 na 22 ziyaxhumana uma sihlanganisa noma sisusa. Ziyizinombolo zomndeni.</p> <p>Dweba i bha dayagramu engenalutho njengoba kukhonjisiwe.</p> <p>Abafundi banikeza imibono yokuxhumana phakathi kwe 17, 5 na 22 nokuthi inombolo ngayinye kumele iye kuphi kwi bha dayagramu.</p> <p>Bhala imibono yabafundi kumakholomu okubala ukuhlanganisa nokususa amabili njengasekuqaleni. Susa imibono engelona iqiniso/engafanele. Kungadingeka ukuthi ulekelele abafundi kokokugcina kumakholomu amabili ngokusebenzisa amafreyimu kanje:</p> <p>$22 = \square + \square$; $5 = \square - \square$; $17 = \square - \square$</p> <p>Uthisha: Ngezinombolo zomndeni ngazinye zingenza imisho yezinombolo yokuhlanganisa e-4 nokususa o-4. Ake sibone ukuthi akukho yini esikushiyile</p> <p>Qopha/bhala imisho yezinombolo nge 17, 5 na 22 abeshiyiwe.</p>	<p>Bhala 17, 5 na 22 ebhodini.</p> <p style="text-align: center;">17 5 22</p> <div style="border: 1px solid black; width: 100%; height: 60px; margin: 10px 0;"></div> <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 10px;"> <thead> <tr> <th style="padding: 5px;">+ ukubala</th> <th style="padding: 5px;">– ukubala</th> </tr> </thead> <tbody> <tr> <td style="padding: 5px;">$5 + 17 = 22$</td> <td style="padding: 5px;">$22 - 17 = 5$</td> </tr> <tr> <td style="padding: 5px;">$17 + 5 = 22$</td> <td style="padding: 5px;">$22 - 5 = 17$</td> </tr> <tr> <td style="padding: 5px;">$22 = 5 + 17$</td> <td style="padding: 5px;">$5 = 22 - 17$</td> </tr> <tr> <td style="padding: 5px;">$22 = 17 + 5$</td> <td style="padding: 5px;">$17 = 22 - 5$</td> </tr> </tbody> </table>	+ ukubala	– ukubala	$5 + 17 = 22$	$22 - 17 = 5$	$17 + 5 = 22$	$22 - 5 = 17$	$22 = 5 + 17$	$5 = 22 - 17$	$22 = 17 + 5$	$17 = 22 - 5$
+ ukubala	– ukubala										
$5 + 17 = 22$	$22 - 17 = 5$										
$17 + 5 = 22$	$22 - 5 = 17$										
$22 = 5 + 17$	$5 = 22 - 17$										
$22 = 17 + 5$	$17 = 22 - 5$										

Imisebenzi yomfundi ngamunye

Manje abafundi kumele basebenzise amashadi omfundi ngamunye anikeziwe kusifundo sokuqalisa 3.

Abafundi kufanele bafake izinombolo zemindeni kuma bha dayagramu afanele. Kufanele bameshe osayizi bezinombolo ezimbili ezincane nosayizi bama bha amancane.

Ukuxhumanisa ukuhlanganisa nokususa

Igama:

Ukuxhumanisa ukuhlanganisa nokususa Isifundo Sokuqalisa 3: Umsebenzi womfundi ngamunye

Bhala izinombolo zemindeni ku bha dayagramu efanele ngezansi. Bese ubhala imisho yezinombolo yokuhlanganisa emine neyokususa emine ngenombolo yomndeni ngayinye.

$$5 + 5 = 10 \quad 3 + 4 = 7 \quad 11 + 1 = 12 \quad 9 = 2 + 7$$

Qala ngo $5 + 5 = 10$. Yimuphi umdwebo omesha i $5 + 5$?

Qaphela ukuthi i $5 + 5 = 10$ sinemisho yezinombolo emibili kuphela uma kuhlanganiswa noma kususwa.

<table border="1"><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table>					<table border="1"><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table>					<table border="1"><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table>					<table border="1"><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table>				
Ukuhlanganisa: <hr/> <hr/> <hr/>	Ukuhlanganisa: <hr/> <hr/> <hr/>	Ukuhlanganisa: <hr/> <hr/> <hr/>	Ukuhlanganisa: <hr/> <hr/> <hr/>																
Ukususa: <hr/> <hr/> <hr/>	Ukususa: <hr/> <hr/> <hr/>	Ukususa: <hr/> <hr/> <hr/>	Ukususa: <hr/> <hr/> <hr/>																

Support Video

Ukuxhumanisa ukuhlanganisa nokususa 3



<https://youtu.be/r02iTWJMfP0>

Ukuxhumanisa ukuhlanganisa nokususa

Support Video

Ukuxhumanisa ukuhlanganisa nokususa 4



<https://youtu.be/KPsfH209EEM>

UKUXHUMANISA UKUHLANGANISA NOKUSUSA: ISIFUNDO SOKUQALISA 4

Umzuzu o-1 wokufudumeza ingqondo

Dweba i bha dayagramu yenhlanganisela yanoma iziphi izinombolo e-3 kuhlu lwezinombolo 1-20. Izibonelo ezimbili zinikeziwe ngezansi. Dweba ama bha dayagramu ukuthi ukubukeka kulingane nezinombolo.

7	3
10	

4	9
13	

Manje cela abafundi bakuphe imisho yezinombolo ehlukeno ngokuhlanganisa nokususa efanele ama bha dayagramu. Ngesikhathi abafundi bephendula ngemisho yezinombolo engalunga, khomba izinombolo ku bha dayagramu

Qinisekisa ukuthi abafundi bakunikeza imisho yezinombolo yokuhlanganisa neyokususa:

isib. $7 + 3 = 10$ $3 + 7 = 10$ $10 - 3 = 7$ $10 - 7 = 3$

Gqogquzela abafundi ukuthi bakuphe imisho yezinombolo lapho "impendulo" iza kuqala, isib. $10 = 7 + 3$ $10 = 3 + 7$ $3 = 10 - 7$ $7 = 10 - 3$

Qaphela: Kuhlale kunemisho yezinombolo e-8 njenge-8 ngaphezulu esisebenzayo nge bha dayagramu ngayinye. Akusikho ukuthi abafundi kufanele baphe zonke izimpendulo ezingatholakala, kodwa kuhle ukubagqogquzela ukuthi bakucabange lokhu.

Ukulandelana komsebenzi

Kulesi sifundo sisebenzisa ukuxhumana phakathi kokuhlanganisa nokususa ukubhala ukubala okuhlukeno ngesethi yezinombolo ezifanayo.

Phatha amalebuli abhalwe 'Kukhulu' 'Kuncane ne 'Kuncane'.

Uthisha: Sifundile ukuthi kune bha e-1 Enkulu na- 2 Amancane ezinombolweni zomndeni. Ama bha siwabize sathi Kukhulu, Kuncane no Kuncane (phakamisa amalebuli). Ubani ongangisiza ukulebula amabha kule bha dayagramu?

Biza umfundi azonamathisela amagama eduze nama bha.

Uthisha: Ngifuna sigcwalise izinombolo zomndeni 15, 5 ne 10 kule bha dayagramu.

Bhala 15, 5 ne 10 ebhodini. Khumbuza abafundi ukuthi inombolo enkulu kunazo zonke izoya ku bha ebhalwe Kukhulu bese kuthi ezimbili ezincane zizoya kuma bha abhalwe Kuncane. Gcwalisa izinombolo ngokusizwa ngabafundi. Uma bephambanisa i 10 ne 5, khumbuza abafundi ukuthi usayizi webha kumele umeshe usayizi wenombolo.

Dweba le bha dayagramu engezansi ebhodini.

Small	Small
Big	

15 5 10

10	5
15	

<p>Uthisha: Nginikezeni imisho yezinombolo zomndeni 15, 5 ne 10.</p> <p><i>Qaphela: Akudingeki ukuthi uthole imisho yonke e-8 kulezi nombolo zomndeni. Konke ofuna ukukubona ukuthi abafundi bayakuqonda ubudlelwano obuphakathi kwezinombolo. Uma kukhona imibono engelona iqiniso abakunikeza yona khumbuza ikilasi ngemisho yokuyiqiniso nokungelona iqiniso abayifundile phambilini,</i></p> <p>isb.Kuncane — Kukhulu = Kuncane akulona iqiniso</p>					
<p>Isibalo: 25 – 22</p> <p>Uthisha: Uma sizama ukwenza lokhu kubala ngokubala sihlehla nga-22 sisukela ku-25 lokhu kuzothatha isikhathi eside. Kodwa singadweba i bha dayagramu yezinombolo zomndeni ukuthola indlela elula yokufika kunombolo eshiyiwe. A-25 oKukhulu kanti a-22 omunye waBancane.</p> <p>Dweba i bha dayagramuugcwalise nga 22 na 25.</p> <p>Uthisha: Le bha incane ngoba ama 22 na 25 (khomba emdwebweni) asondelene. Ngakho, kungaba lula ukubuza ukuthi a ‘22 ehlanganiswa nani alingana na 25?’ (khomba emdwebweni ngesikhathi usho lokhu; bhala umusho) noma ama ‘25 kususwa bani olingana nama 22?’ (khomba emdwebweni; bhala umusho). Ngingayithola impendulo ngokushesha ngokubala ngiqhubeka ngisukela kuma 22, noma ngokubala ngehle ngisukela kuma 25.</p> <p>Bala inombolo eshiyiwe nabafundi.</p> <p>Bhala o ‘3’ ku bha encane emabhokisini angenalutho kwimisho yezinombolo.</p> <p>Uthisha: Uma sesinayo inombolo ebishiyiwe siyakwazi ukubona yonke imisho yezinombolo yokuhlanganisa neyokususa engenziwa ngalenombolo yomndeni.</p>	<p>25 – 22 = <input type="text"/></p> <table border="1" data-bbox="1038 853 1326 981"> <tr> <td style="width: 20px; height: 20px;"></td> <td style="width: 60px; height: 20px; text-align: center;">22</td> </tr> <tr> <td colspan="2" style="height: 20px; text-align: center;">25</td> </tr> </table> <p>Bhala izibalo: $22 + \square = 25$ $25 - \square = 22$</p> <p>Shiya umdwebo nemisho ebhodini.</p>		22	25	
	22				
25					

Khumbuza abafundi ngemisho engenziwa/engakhiwa ngesikhathi ukhomba ama bha. Uthisha: (ukhomba esibalweni sokuqala) Senze ukubala o-3 ukufinyelela kwimpendulo kunokubala nga-22. Singabheka ku bha dayagramu ukuthola ukubala okulula.	
---	--

Imisebenzi yomfundi ngamunye

Manje abafundi kufanele bazame izibonelo ezilandelayo ngokuqale bakopishe i bha dayagramu bese befaka izinombolo ezinikeziwe. Abafundi kumele babhale ukubala okusheshayo abakusebenzisile ukuthola impendulo.

$21 - 17 = \square$

$28 - 25 = \square$

Abafundi kufanele basebenzise Kukhulu Kanye no Kuncane embuzweni ukuchaza ukucabanga kwabo. Isb. “Ngokwa $21 - 17$, ngishintshe ukubala ukuze ngibale ngiya phezulu ngisuka kwi-17 ukuya e-21 ngokubala i $17 + \square = 21$ ” noma “ngingashintsha ukubala kwa $21 - 17$ ngokubala ngehle ngisuka ku 21 ukuya kwi 17 ngokubala $21 - \square = 17$.”

Umsebenzi wasekhaya: Ishadi lomsebenzi 1

Ekupheleni kwesifundo sanamuhla nikeza abafundi ishadi lomsebenzi 1.

Akudingeki ukuthi ubekele abafundi isikhathi uma benza lomsebenzi. Inhloso ukubanikeza ithuba lokuzilolonga ngokubhalwayo emsebenzini ebebewenza ngekhanda.

Ukuxhumanisa ukuhlanganisa nokususa

Igama:

Ukuxhumanisa ukuhlanganisa nokususa: Ishadi lomsebenzi I

<p>1. $67 + \square = 72$</p>	<p>Gcwalisa nge 17, 3 na 20 kwimisho yezinombolo engezansi (II-14).</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td style="padding: 5px;">17</td> <td style="padding: 5px;">3</td> </tr> <tr> <td colspan="2" style="text-align: center; padding: 5px;">20</td> </tr> </table>	17	3	20							
17	3										
20											
<p>2. $54 - 6 = \square$</p>	<p>II. $\square - 3 = \square$</p>										
<p>3. $78 + 7 = \square$</p>	<p>12. $\square + 3 = \square$</p>										
<p>4. $26 + \square = 34$</p>	<p>13. $\square - \square = 3$</p>										
<p>5. $99 + \square = 102$</p>	<p>14. $3 + \square = \square$</p>										
<p>6. Gcwalisa lezinombolo ezintathu emabhokisini: $13 - 8 = 5$</p> <table border="1" style="margin-left: auto; margin-right: auto; width: 80%;"> <tr> <td style="width: 20%; height: 30px; text-align: center;">\square</td> <td style="width: 20%;"></td> <td style="width: 20%; height: 30px; text-align: center;">\square</td> <td style="width: 20%;"></td> <td style="width: 20%;"></td> </tr> <tr> <td colspan="2" style="height: 30px;"></td> <td style="text-align: center;">\square</td> <td colspan="2"></td> </tr> </table>	\square		\square					\square			<p>15. $198 + \square = 202$</p> <p>16. $31 - \square = 28$</p>
\square		\square									
		\square									
<p>7. $206 - 8 = \square$</p>	<p>17. $46 + 8 = \square$</p>										
<p>8. $48 + \square = 54$</p>	<p>18. $55 + \square = 63$</p>										
<p>9. $81 - \square = 78$</p>	<p>19. $64 - \square = 59$</p>										
<p>10. $39 + \square = 44$</p>	<p>20. $65 + \square = 72$</p>										

Ukuxhumanisa ukhlanganisa nokususa

Amanothi kathisha

Lapha ungenza amanothi ngesifundo kanye nokuthi yibaphi abafundi abasadinga ukusizwa ngesu lokuxhumanisa kusetshenziswa ishumi. Ungenza namanothi nganoma iyiphi enye into ofuna ukubhekana nayo/ukuyilungisa esifundweni sokuqalisa esilandelayo.

UKUXHUMANISA UKUHLANGANISA NOKUSUSA: ISIFUNDO SOKUQALISA 5

Umzuzu o-1 wokufudumeza ingqondo

Ukusebenza ngama bha dayagramu

Ukulandelana komsebenzi

Kulesi sifundo sithola ukubala okulula ngokubala sihlanganisa lapho enye yezinombolo ezifakiwe kungeshiyiwe.

<p>Izibalo: $6 + \square = 25$ $\square + 3 = 28$</p> <p>Uthisha: Esifundweni sokugcina sibonile ukuthi singakushintsha ukubala sisebenzise indlela elula exhumanisa ukuhlanganisa nokususa ukuthola inombolo eshiyiwe/wngekho. Buka lokhu kubala okusebhodini.</p> <p>Dweba ama bha dayagramu njengoba kubonisiwe bese usebenza nabafundi ukwakha ama bha dayagramu ukwenza izibalo.</p> <p>Uthisha: Ngisizeni ukuqedela ama bha dayagramu ukwenza izibalo.</p> <p>Cela abafundi ukuthi bakuyalele ukuthi ubadwebe kuphi olayini kuma bha aphezulu, nokuthi uyibhale kuphi inombolo ngayinye.</p> <p>Uthisha: Kulula ukuphendula a 25 ususa 6 (khomba izinombolo kuma bha) noma 28 ususa 3 (khomba izinombolo ku bha).</p> <p>Sebenza lezi zibalo nabafundi, usebenzisa ukuxhumanisa ngeshumi lapho kudingeka khona (isb. $25 - 5$ nga 20 na $20 - 1$ yi 19, ngakho $25 - 6 = 19$).</p> <p>Bhala izimpendulo kuma bha angenalutho namabhokisi angenalutho njengoba kukhonjisiwe. Gcwalisa ngemisho yezinombolo yasekuqaleni.</p> <p>Uthisha: Sithole kulula ukuxazulula ukubala kokuhlanganisa ngokukushintshela ekubaleni ngokususa.</p>	<p>Bhala ukubala kuma bha dayagramu angenalutho njengoba kukhonjisiwe:</p> <p>$6 + \square = 25$ $\square + 3 = 28$</p> <div style="display: flex; justify-content: space-around; margin: 10px 0;"> <table border="1" style="border-collapse: collapse; width: 100px; height: 40px;"> <tr><td style="width: 50px; height: 20px;"></td><td style="width: 50px; height: 20px;"></td></tr> <tr><td style="width: 50px; height: 20px;"></td><td style="width: 50px; height: 20px;"></td></tr> </table> <table border="1" style="border-collapse: collapse; width: 100px; height: 40px;"> <tr><td style="width: 50px; height: 20px;"></td><td style="width: 50px; height: 20px;"></td></tr> <tr><td style="width: 50px; height: 20px;"></td><td style="width: 50px; height: 20px;"></td></tr> </table> </div> <div style="display: flex; justify-content: space-around; margin: 10px 0;"> <table border="1" style="border-collapse: collapse; width: 100px; text-align: center;"> <tr><td style="width: 20px; height: 20px;">6</td><td style="width: 80px; height: 20px;"></td></tr> <tr><td colspan="2" style="border-top: 1px solid black; height: 20px;">25</td></tr> </table> <table border="1" style="border-collapse: collapse; width: 100px; text-align: center;"> <tr><td style="width: 80px; height: 20px;"></td><td style="width: 20px; height: 20px;">3</td></tr> <tr><td colspan="2" style="border-top: 1px solid black; height: 20px;">28</td></tr> </table> </div> <p style="margin: 10px 0;">$25 - 6 = \square$ $28 - 3 = \square$</p> <div style="display: flex; justify-content: space-around; margin: 10px 0;"> <table border="1" style="border-collapse: collapse; width: 100px; text-align: center;"> <tr><td style="width: 20px; height: 20px;">6</td><td style="width: 80px; height: 20px;">19</td></tr> <tr><td colspan="2" style="border-top: 1px solid black; height: 20px;">25</td></tr> </table> <table border="1" style="border-collapse: collapse; width: 100px; text-align: center;"> <tr><td style="width: 40px; height: 20px;">25</td><td style="width: 20px; height: 20px;">3</td></tr> <tr><td colspan="2" style="border-top: 1px solid black; height: 20px;">28</td></tr> </table> </div> <p style="margin: 10px 0;">$25 - 6 = \boxed{19}$ $28 - 3 = \boxed{25}$</p> <div style="display: flex; justify-content: space-around; margin: 10px 0;"> <div style="text-align: center;"> <p>↓</p> <p>$6 + \boxed{19} = 25$</p> </div> <div style="text-align: center;"> <p>↓</p> <p>$\boxed{25} + 3 = 28$</p> </div> </div>									6		25			3	28		6	19	25		25	3	28	
6																									
25																									
	3																								
28																									
6	19																								
25																									
25	3																								
28																									
<p>Uthisha: Sibonile ukuthi uma sinokubala okulukhuni ekuhlanganiseni noma sisusa siyakwazi ukubheka ukuthi ikhona yini indlela esingashintsha ngayo sizenze zibe lula. Kodwa asikwazi ukuvele sizishintshe zibe yinoma ikuphi ukubala.</p>	<p style="text-align: center;">Ngingashintsha...?</p> <p>$6 + \square = 25$ kube $\square - 6 = 25$</p> <p style="text-align: center;">$6 + \square = 25$ iqiniso</p> <div style="display: flex; justify-content: space-around; margin-top: 10px;"> <div style="text-align: center;"> <p>↑</p> <p>Kuncane</p> </div> <div style="text-align: center;"> <p>↑</p> <p>Kuncane</p> </div> <div style="text-align: center;"> <p>↑</p> <p>Kukhulu</p> </div> </div>																								

<p>Uthisha: Ngingakwazi ukushintsha $6 + \square = 25$ ube $\square - 6 = 25$?</p> <p>Bhala izibalo ebhodini. Tshela abafundi ukuthi imisho yezinombolo kumele ixhumane ngemfanelo kusebenza umqondo ka Kukhulu, Kuncane, Kuncane ku bha dayagramu.</p> <p>Siza abafundi ukuthi bacabange ukuthi yiziphi kulezi zinombolo kulomusho ezingathola ilebuli Kukhulu, Kuncane no Kuncane kuzona. Khuluma ngokuthi ngabe u 'Kuncane + Kuncane = Kukhulu' kunengqondo noma cha. Buza ukuthi ngabe kuyiqiniso noma akulona iqiniso.</p> <p>Siza abafundi balebule $\square - 6 = 25$ ngendlela efanayo bese niyanquma uma 'Kuncane - Kuncane = Kukhulu' kuyiqiniso noma akulona iqiniso.</p> <p>Abafundi kufanele babone ukuthi $\square - 6 = 25$ akulona iqiniso kulomndeni wezinombolo. Faka iqiniso kanye no akulona iqiniso kwimisho yezinombolo.</p>	<p style="text-align: center;">$\square - 6 = 25$ akulona iqiniso</p> <p style="text-align: center;">↑ ↑ ↑</p> <p style="text-align: center;">Kuncane Kuncane Kukhulu</p>
---	--

Imisebenzi yomfundi ngamunye

Manje abafundi kufanele bazame izibonelo ezilandelayo. Kufanele badwebe i bha dayagramu ngokubala ngakunye bese bephinda bebhala umusho wezinombolo njengesibalo esilula ukuthola inombolo eshiyiwe/engekho. Uma abafundi bexakeka noma beba nengcindezi, bakhukhaze ukuthi balebule ama bha njenge Kukhulu, Kuncane no Kuncane.

$$7 + \square = 32 \quad \square + 3 = 104$$

Support Video

Ukuxhumanisa ukuhlanganisa nokususa 5



<https://youtu.be/bkmaf0ArzuY>

UKUXHUMANISA UKUHLANGANISA NOKUSUSA: ISIFUNDO SOKUQALISA 6

Umzuzu o-1 wokufudumeza ingqondo

Ukusebenza ngama bha dayagramu

Ukulandelana komsebenzi

Kulesi sifundo sisebenzisa ubudlelwano phakathi kokuhlanganisa nokususa ukwenza ukubala ngokususa lula.

<p>Izibalo: $\square - 30 = 9$ $30 - \square = 9$</p> <p>Uthisha: Esifundweni sokugcina sibonile ukuthi singakwazi ukushintsha ukubala kuye ekuhlanganiseni noma ukususa okuhlukile ukuthola inombolo eshiyiwe. Bheka lezi zibalo ebhodini.</p> <p>Dweba ama bha dayagramu angenalutho akhonjisiwe bese usebenza nabafundi ukwakha am bha dayagramu ukwenza izibalo.</p> <p>Uthisha: Ngisizeni ukuqedela ama bha dayagramu alezi zibalo. Ngabe ama bha dayagramu azofana noma azohluka?</p> <p>Abafundi kumele babonise ukuthi ahlukile.</p> <p>Kusibonelo sokuqala ($\square - 30 = 9$), okungaziwa Kukhulu bese a- 30 ne 9 ngo Kuncane.</p> <p>Kusibonelo sesibili ($30 - \square = 9$), 30 o Kukhulu kanti okungaziwa ne 9 ngo Kuncane.</p> <p>Cela abafundi ukuthi bakuyalele ukuthi ubadwebe kuphi olayini kuma bha aphezulu, nokuthi uyibhale kuphi inombolo ngayinye. Uma abafundi bexakeka, bagqugquzele ukulebula ama bha ku bha dayagramu njengo Kukhulu, Kuncane no Kuncane.</p> <p>Qhubeka utshela abafundi ukuthi baqaphele okufanayo nokuhlukile kulama bha dayagramu amabili.</p> <p>Bhala lokhu kubala okulandelayo ngaphansi kwe bha dayagramu efanele njengoba kukhonjisiwe:</p> <p>$30 + 9 = \square$ $30 - \square = 9$</p>	<p>Bhala ukubala kuma bha dayagramu angenalutho njengoba kukhonjisiwe:</p> <p>$\square - 30 = 9$ $30 - \square = 9$</p> <table border="1" style="width: 100%; height: 40px; margin-bottom: 20px;"> <tr><td style="width: 50%;"></td><td style="width: 50%;"></td></tr> <tr><td style="width: 50%;"></td><td style="width: 50%;"></td></tr> </table> <table border="1" style="width: 100%; margin-bottom: 20px;"> <tr><td style="width: 50%; text-align: center;">30</td><td style="width: 5%; text-align: center;">9</td><td style="width: 50%;"></td><td style="width: 5%; text-align: center;">9</td></tr> <tr><td colspan="2"></td><td style="text-align: center;">30</td><td></td></tr> </table> <table border="1" style="width: 100%; margin-bottom: 20px;"> <tr><td style="width: 50%; text-align: center;">30</td><td style="width: 5%; text-align: center;">9</td><td style="width: 50%;"></td><td style="width: 5%; text-align: center;">9</td></tr> <tr><td colspan="2"></td><td style="text-align: center;">30</td><td></td></tr> </table> <p style="text-align: center;">$30 + 9 = \square$ $30 - \square = 9$</p>					30	9		9			30		30	9		9			30	
30	9		9																		
		30																			
30	9		9																		
		30																			

<p>Sebenzisana nabafundi ukubala izimpendulo nga 30 + 9 (sixhunyaniswe ne bha dayagramu yokuqala) na 30 – 9 (sixhunyaniswe ne bha dayagramu yesibili).</p> <p>Sebenza nabafundi ukufaka izinombolo ezifanele ekubaleni nama bha dayagramu njengoba kukhonjisiwe.</p> <p>Gcwalisa imisho yezinombolo usebenzisa izinombolo zasekuqaleni. Khombisa abafundi ukuthi ukuthola a 30 + 9 kusize ukuxazulula $\square - 30 = 9$ nokuthi ukusebenza ukuthola a 30 – 9 kusize ukuxazulula $30 - \square = 9$.</p>	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="border: 1px solid black; padding: 5px; text-align: center;">30</td> <td style="border: 1px solid black; padding: 5px; text-align: center;">9</td> <td style="border: 1px solid black; padding: 5px; text-align: center;">21</td> <td style="border: 1px solid black; padding: 5px; text-align: center;">9</td> </tr> <tr> <td colspan="2" style="border: 1px solid black; padding: 5px; text-align: center;">39</td> <td colspan="2" style="border: 1px solid black; padding: 5px; text-align: center;">30</td> </tr> </table> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="text-align: center; padding: 5px;">$30 + 9 = \boxed{39}$</td> <td style="text-align: center; padding: 5px;">$30 - 9 = \boxed{21}$</td> </tr> <tr> <td style="text-align: center; padding: 5px;">↓</td> <td style="text-align: center; padding: 5px;">↓</td> </tr> <tr> <td style="text-align: center; padding: 5px;">$\boxed{39} - 30 = 9$</td> <td style="text-align: center; padding: 5px;">$30 - \boxed{21} = 9$</td> </tr> </table>	30	9	21	9	39		30		$30 + 9 = \boxed{39}$	$30 - 9 = \boxed{21}$	↓	↓	$\boxed{39} - 30 = 9$	$30 - \boxed{21} = 9$
30	9	21	9												
39		30													
$30 + 9 = \boxed{39}$	$30 - 9 = \boxed{21}$														
↓	↓														
$\boxed{39} - 30 = 9$	$30 - \boxed{21} = 9$														

Imisebenzi yomfundi ngamunye

Manje abafundi kufanele bazame izibonelo ezilandelayo ngokudweba i bha dayagramu bese bephinda bebhala umusho wezinombolo njengesibalo esilula ukuthola inombolo eshiyiwe/engekho:

$$25 - \square = 9 \quad \square - 25 = 9$$

Abafundi kufanele bachaze ukucabanga kwabo, isb. “ngokwa $25 - \square = 9$, ngingashintsha ukubala kube nga $25 - 9$. Uma ngisusa i 9 ku 25, ngithola 16 ngoba $25 - 9 = 16$ kanti $20 - 4 = 16$. Lokhu kusho ukuthi $25 - \boxed{16} = 9$.”

Support Video

Ukuxhumanisa ukuhlanganisa nokususa 6



<https://youtu.be/OnF8U7aBPOc>

UKUXHUMANISA UKUHLANGANISA NOKUSUSA: ISIFUNDO SOKUQALISA 7

Umzuzu o-1 wokufudumeza ingqondo

- a. Ukuhlanganisa okusheshayo: izinombolo ezinedijithi e-1nezinombolo ezinamadijithi a-2 (sebenzisa izinombolo ezinkulu ezinikeza izimpendulo ezingaphezudlwana kwe 100 na 200, isb. $99 + 2$; $99 + 4$; $198 + 4$; $199 + 3$)
- b. Ukususa okusheshayo: izinombolo ezinedijithi e-1nezinombolweni ezinamadijithi a-2 (sebenzisa izinombolo ezingaphezudlwana kwe 100 na 200, isb. $101 - 2$; $103 - 4$; $203 - 4$; $201 - 3$)

Ukulandelana komsebenzi

Kulesi sifundo sixhumanisa ukuhlanganisa nokususa ukuxazulula kalula izibalo zokuhlanganisa nokususa ngezinombolo ezinkulu.

<p>Uthisha: Asisebenzise esikufundile ukuxazulula ukubala ngezinombolo ezinkulu. Ungakwazi ukuthola ubudlelwano phakathi kwezinombolo 105, 10 na 95?</p> <p>Dweba i bha dayagramu njengoba kukhonjisiwe.</p> <p>Uthisha: izinombolo 105, 10 na 95 zixhumene uma sihlanganisa noma sisusa. Zingacatshangwa njengezinombolo zomndeni.</p> <p>Abafundi bapha abakuqagula njengokuxhumana phakathi kwe 105, 10 na 95 nalapho inombolo ngayinye ekufanele iye khona ku bha dayagramu.</p> <p>Sebenza ngemibono yabafundi njengasekuqaleni. Bhala imibono evunyiwe ebhodini kuma kholomu amabili. Kungadingeka ukuthi usize abafundi kulokhu okubili kokucina kukholomu ngayinye ngokusebenzisa ifreyimu kanje:</p> <p>$105 = \square + \square$; $95 = \square - \square$; $10 = \square - \square$</p> <p>Uthisha: Ngazononke izinombolo zomndeni singenza imisho yezinombolo e-4 yokuhlanganisa ne-4 yokususa. Ake sibheke sibone ukuthi kukhona yini esikushiyele.</p> <p>Bhala imisho yezinombolo nga 105, 10 na 95 ebishiyiwe.</p>	<p>Bhala 105, 10 na 95 ebhodini.</p> <p style="text-align: center;">105 10 95</p> <table border="1" style="margin: 10px auto; border-collapse: collapse;"> <tr> <td style="width: 80%; height: 30px;"></td> <td style="width: 20%;"></td> </tr> <tr> <td colspan="2" style="height: 30px;"></td> </tr> </table> <table border="1" style="margin: 10px auto; border-collapse: collapse;"> <tr> <td style="width: 80%; text-align: center; padding: 5px;">95</td> <td style="width: 20%; text-align: center; padding: 5px;">10</td> </tr> <tr> <td colspan="2" style="text-align: center; padding: 5px;">105</td> </tr> </table> <table border="1" style="margin: 10px auto; border-collapse: collapse;"> <thead> <tr> <th style="width: 50%; text-align: center;">+</th> <th style="width: 50%; text-align: center;">-</th> </tr> <tr> <th style="text-align: center;">ukubala</th> <th style="text-align: center;">ukubala</th> </tr> </thead> <tbody> <tr> <td style="padding: 5px;">$10 + 95 = 105$</td> <td style="padding: 5px;">$105 - 10 = 95$</td> </tr> <tr> <td style="padding: 5px;">$95 + 10 = 105$</td> <td style="padding: 5px;">$105 - 95 = 10$</td> </tr> <tr> <td style="padding: 5px;">$105 = 95 + 10$</td> <td style="padding: 5px;">$95 = 105 - 10$</td> </tr> <tr> <td style="padding: 5px;">$105 = 10 + 95$</td> <td style="padding: 5px;">$10 = 105 - 95$</td> </tr> </tbody> </table>					95	10	105		+	-	ukubala	ukubala	$10 + 95 = 105$	$105 - 10 = 95$	$95 + 10 = 105$	$105 - 95 = 10$	$105 = 95 + 10$	$95 = 105 - 10$	$105 = 10 + 95$	$10 = 105 - 95$
95	10																				
105																					
+	-																				
ukubala	ukubala																				
$10 + 95 = 105$	$105 - 10 = 95$																				
$95 + 10 = 105$	$105 - 95 = 10$																				
$105 = 95 + 10$	$95 = 105 - 10$																				
$105 = 10 + 95$	$10 = 105 - 95$																				

Dweba i bha dayagramu emele enye nenye yalezi zibalo. Faka amalebulo 'Kukhulu', 'Kuncane' no 'Kuncane'. Thola i bha eshiyiwe bese ubhala impendulo ebhulokhini.

$$101 - 98 = \square$$

$$\square - 99 = 4$$

$$\square + 2 = 201$$

Imisebenzi yomfundi ngayedwa

Manje abafundi kufanele bazame izibonelo ezilandelayo ngokuthatha isinqumo ukuthi iyiphi inombolo. Kukhulu nokuthi ikuphi o Kuncane, bedweba i bha dayagramu bese bexazulula ukuthola inombolo eshiyiwe.

$$115 - \square = 90 \quad \square + 3 = 210$$

Abafundi kufanele bachaze ukucabanga kwabo.

Umsebenzi wasekhaya: Ishadi lomsebenzi 2

Ekupheleni kwesifundo sanamuhla nikeza abafundi ishadi lomsebenzi 2.

Akudingeki ukuthi ubekele abafundi isikhathi uma benza lomsebenzi. Inhloso ukubanikeza ithuba lokuzilolonga ngokubhalwayo emsebenzini ebebewenza ngekhanda.

Support Video

Ukuxhumanisa ukuhlanganisa nokususa 7



<https://youtu.be/vIFAjz8cKMQ>

Ukuxhumanisa ukuhlanganisa nokususa

Igama:

Ukuxhumanisa ukuhlanganisa nokususa: Ishadi lomsebenzi 2

1. $72 - 67 = \square$	4. $94 - 88 = \square$				
2. $4 + \square = 303$	5. $302 - 298 = \square$				
3. $\square - 63 = 6$	6. <table border="1"><tr><td>\square</td><td>98</td></tr><tr><td colspan="2">103</td></tr></table>	\square	98	103	
\square	98				
103					
$61 + 27 = 88$ $34 + 27 = 61$					
7. $61 - 27 = \square$					
$36 + 25 = 61$ $61 + 36 = 97$					
8. $\square + 36 = 61$					
Sebenzisa izinombolo ezintathu ezingezansi ezibalweni ezimbili zokususa ezahlukene:					
$78 + 52 = 130$					
9. $\square - \square = \square$					
10. $\square - \square = \square$					

Ukuxhumanisa ukuhlanganisa nokususa

Amanothi kathisha

Lapha ungenza amanothi ngesifundo kanye nokuthi yibaphi abafundi abasadinga ukusizwa ngesu lokuxhumanisa kusetshenziswa ishumi. Ungenza namanothi nganoma iyiphi enye into ofuna ukubhekana nayo/ukuyilungisa esifundweni sokuqalisa esilandelayo.

UKUXHUMANISA UKUHLANGANISA NOKUSUSA: ISIFUNDO SOKUQALISA 8

Umzuzu o-1 wokufudumeza ingqondo

- a. Ukuhlanganisa okusheshayo: izinombolo ezinedijithi e-1nezinombolo ezinamadijithi a-2
- b. Ukususa okusheshayo: izinombolo ezinedijithi e-1ezinombolweni ezinamadijithi a-2

Ukulandelana komsebenzi

Kulesi sifundo sisebenzisa ubudlelwano phakathi kokuhlanganisa nokususa ukuxazulula izibalo singasebenzisi i bha dayagramu.

<p>Bhala izibalo ezikhonjiswe ebhodini. Shiya isikhala ngaphansi kwesibalo ngasinye ukubhala ukubala kokuhlanganisa noma kokususa okufanele.</p> <p>Abafundi kumele bazame ukucabanga i bha dayagramu ngesibalo ngasinye. Uma benengcindezi ungayidweba i bha dayagramu ngaphansi kwesibalo.</p> <p>Izibonelo zinikeziwe ngezansi ukukhombisa ukuthi ungazenza kanjani izibalo zokuqala ezintathu.</p>	<p>$\square + 3 = 28$</p> <p>$\square - 37 = 6$</p> <p>$202 - 198 = \square$</p> <p>$2 + \square = 51$</p> <p>$22 - \square = 3$</p>
<p>Uthisha: Lomsebenzi ungafundwa njengokuthi: Yini ihlanganiswa no-3 elingana na-28? Ungasishintsha kanjani lesi sibalo ukwenza kube lula ukuthola inombolo eshiyiwe?</p> <p>Abafundi: $28 - 3$</p> <p>Qopha/rekhoda lokhu kubala njengasekuqaleni.</p> <p>Uthisha: Ngakhoke, yini impendulo?</p> <p>Abafundi: 25</p> <p>Abafundi bangabala behla uma bengazi (27, 26, 25, ngakho; impendulo nga-25).</p>	<p>$\square + 3 = 28$</p> <p>$28 - 3 = \square$</p>
<p>Uthisha: Lomsebenzi ungafundwa njengokuthi: Yini sisusa a-37 elingana ne-6? Ungasishintsha kanjani lesi sibalo ukwenza kube lula ukuthola inombolo eshiyiwe?</p> <p>Abafundi: $6 + 37$ (or $37 + 6$)</p> <p>Qopha/rekhoda lokhu kubala njengasekuqaleni.</p> <p>Uthisha: Ngakhoke, yini impendulo?</p> <p>Abafundi: 43</p> <p>Abafundi bangabala benyukela kusukela ku-37 (38, 39, 40, 41, 42, 43, ngakho; impendulo nga-43).</p>	<p>$\square - 37 = 6$</p> <p>$6 + 37 = \square$ noma $37 + 6 = \square$</p>

<p>Abanye bangaxhumanisa ngeshumi ($37 + 3 = 40$ nama $40 + 3 = 43$).</p>	
<p>Uthisha: Lo msebenzi ufuna uxazulule a 202 ususa 198. Ungasishintsha kanjani lesi sibalo ukwenza kube lula ukuthola impendulo?</p> <p>Abafundi: $198 + \square = 202$</p> <p>Qopha/rekhoda lokhu kubala njengasekuqaleni.</p> <p>Uthisha: Ngakhoke, yini impendulo?</p> <p>Abafundi: 4</p> <p>Abafundi bangabala benyukela kusukela ku 198 (199, 200, 201, 202 ngakho; impendulo i-4). Abanye bangaxhumanisa ngeshumi ($198 + 2 = 200$; $200 + 2 = 202$, ngakho; impendulo i-4).</p>	<p>$202 - 198 = \square$</p> <p>$198 + \square = 202$</p>

Imisebenzi yomfundi ngamunye

Manje abafundi kufanele basebenzise isu lokushintsha ukubala kokuhlanganisa kube ukususa, nokubala ngokususa kube ukuhlanganisa, uma lokhu kushintsha kwenza kube lula ukuthola izinombolo ezishiyiwe.

$$4 + \square = 105$$

$$\square + 5 = 69$$

$$\square - 29 = 2$$

$$41 - 36 = \square$$

Support Video

Ukuxhumanisa ukuhlanganisa nokususa 8



<https://youtu.be/nYoOex4bibl>

Igama:

Ukuxhumanisa ukuhlanganisa nokususa: Isivivinyo esandulelayo

INGXENYE I

Imizuzu e-2 kuleli khasi

<p>1. $76 + \square = 82$</p>	<p>Gcwalisa nge 16, 4 na 20 kwimisho yezinombolo ngezansi (II-14).</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td style="padding: 5px;">16</td> <td style="padding: 5px;">4</td> </tr> <tr> <td colspan="2" style="text-align: center; padding: 5px;">20</td> </tr> </table>	16	4	20	
16	4				
20					
<p>2. $42 - 4 = \square$</p>	<p>11. $\square - 4 = \square$</p>				
<p>3. $86 + 5 = \square$</p>	<p>12. $\square + 4 = \square$</p>				
<p>4. $17 + \square = 23$</p>	<p>13. $\square - \square = 4$</p>				
<p>5. $199 + \square = 201$</p>	<p>14. $4 + \square = \square$</p>				
<p>Gcwalisa lezi zinombolo ezintathu emabhokisini: $11 - 9 = 2$</p> <table border="1" style="width: 100%; height: 100%;"> <tr> <td style="width: 33%; height: 40px; vertical-align: middle;">6. \square</td> <td style="width: 33%; height: 40px; vertical-align: middle;">\square</td> <td style="width: 33%; height: 40px; vertical-align: middle;">7. \square</td> </tr> </table>	6. \square	\square	7. \square	<p>15. $99 + \square = 102$</p>	
6. \square	\square	7. \square			
<p>6. \square</p>	<p>16. $21 - \square = 19$</p>				
<p>7. \square</p>	<p>17. $37 + 6 = \square$</p>				
<p>8. $302 - 5 = \square$</p>	<p>18. $27 + \square = 35$</p>				
<p>9. $29 + \square = 34$</p>	<p>19. $34 - \square = 29$</p>				
<p>10. $91 - \square = 89$</p>	<p>20. $75 + \square = 82$</p>				
<p>Isamba sisuselwa ku-20</p>					

Ukuxhumanisa ukhlanganisa nokususa: Isivivinyo esandulelayo					
INGXENYE 2	Imizuzu e-3 kuleli khasi				
1.	$73 - 68 = \square$				
2.	$6 + \square = 303$				
3.	$\square - 82 = 5$				
4.	$82 - 75 = \square$				
5.	$201 - 199 = \square$				
6.	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 20%; text-align: center; vertical-align: middle;">\square</td> <td style="text-align: center; vertical-align: middle;">99</td> </tr> <tr> <td colspan="2" style="text-align: center; vertical-align: middle;">102</td> </tr> </table>	\square	99	102	
\square	99				
102					
7.	$42 + 15 = 57$ $27 + 15 = 42$ $42 - 15 = \square$				
8.	$42 + 24 = 66$ $24 + 18 = 42$ $\square + 24 = 42$				
<p>Sebenzisa izinombolo ezintathu ezingezansi ezibalweni ezimbili zokususa ezahlukene:</p> <p>$67 + 53 = 120$</p>					
9.	$\square - \square = \square$				
10.	$\square - \square = \square$				
Isamba sisuselwa e-10					

Ukuxhumanisa kusetshenziswa ishumi: Imemorandamu			
Isivivinyo sangaphambili	Ishadi lomsebenzi 1	Ishadi lomsebenzi 2	Isivivinyo esandulelayo
INGXENYE YOKUQALA	1. 10	1. 53	INGXENYE YOKUQALA
1. 10	2. 10	2. 48	1. 10
2. 10	3. 3	3. 8	2. 10
3. 3	4. 7	4. 8	3. 3
4. 2	5. 9	5. 1	4. 2
5. 8	6. 10	6. 3	5. 8
6. 10	7. 5	7. 29	6. 10
7. 5	8. 2	8. 7	7. 5
8. 6	9. 10	9. 3; 44	8. 7
9. 10	10. 6	10. 53; 5	9. 10
10. 0	11. 2		10. 0
11. 56	12. 5		11. 57
12. 63	13. 56		12. 63
13. 33	14. 54		13. 33
14. 48	15. 22		14. 48
15. 50	16. 1		15. 50
16. 127	17. 26		16. 127
17. 30	18. 44		17. 30
18. 43	19. 56		18. 42
19. 3	20. 53		19. 3
20. 7	21. 40		20. 7
INGXENYE YESIBILI	22. 20		INGXENYE YESIBILI
1. 64	23. 6		1. 74
2. 79	24. 33		2. 78
3. 86			3. 86
4. 6			4. 6
5. 75			5. 75
6. 2			6. 2
7. 6			7. 6
8. 54			8. 54
9. 8			9. 8
10. 38			10. 38

Amasu okweqa: Imemorandamu			
Isivivinyo sangaphambili	Ishadi lomsebenzi 1	Ishadi lomsebenzi 2	Isivivinyo esandulelayo
INGXENYE YOKUQALA	1. 65	1. 76	INGXENYE YOKUQALA
1. 54	2. 33	2. 53	1. 52
2. 39	3. 47	3. 39	2. 39
3. 36	4. 3	4. 53	3. 36
4. 47	5. 60	5. 24	4. 47
5. 17	6. 16	6. 15	5. 17
6. 53	7. 32	7. 20	6. 53
7. 44	8. 59	8. 30	7. 44
8. 4	9. 86	9. 20	8. 3
9. 31	10. 40	10. 29	9. 31
10. 11	11. 64		10. 11
11. 60	12. 46		11. 50
12. 48	13. 46		12. 48
13. 54	14. 60		13. 54
14. 46	15. 53		14. 46
15. 40	16. 63		15. 40
16. 39	17. 54		16. 39
17. 20	18. 75		17. 20
18. 89	19. 30		18. 84
19. 40	20. 37		19. 40
20. 46			20. 46
INGXENYE YESIBILI			INGXENYE YESIBILI
1. 59			1. 69
2. 60			2. 60
3. 30			3. 30
4. 20			4. 20
5. 83			5. 83
6. 59			6. 59
7. 22			7. 22
8. 15			8. 15
9. 30			9. 30
10. 25			10. 25

Ukuphinda kabili nokuhlukanisa phakathi: Imemorandamu				
Isivivinyo sangaphambili	Isifundo sokuqalisa 1	Ishadi lomsebenzi 1	Ishadi lomsebenzi 2	Isivivinyo esandulelayo
INGXENYE YOKUQALA	1. O-4 kuphindiwe i-8	1. 12	1. 64	INGXENYE YOKUQALA
1. 12	Amaqoqo amabili o-4 i-8	2. 6	2. 52	1. 14
2. 6	O-4 kuphindphindwe kabili i-8	3. 18	3. 21	2. 7
3. 18	4 x 2 = 8	4. 14	4. 55	3. 18
4. 16		5. 8	5. 46	4. 16
5. 6		6. 9	6. 18	5. 7
6. 8	2. Uhhafu we-8 o-4	7. 20	7. 62	6. 8
7. 20	I-8 sihlukaniswe ka-2 o-4	8. 3	8. 31	7. 20
8. 7	I-8 sihlukaniselwe aba-2 i-4	9. 6	9. 63	8. 6
9. 5	8 ÷ 2 = 4	10. 7	10. 2	9. 5
10. 9		11. 16	11. 88	10. 9
11. 30		12. 22	12. 76	11. 28
12. 14	3. I-9 siphindiwe yi-18	13. 16	13. 43	12. 14
13. 14	Amaqembu amabili e-9 yi-18	14. 60	14. 52	13. 14
14. 200	siphindwe kabili i-9 yi-18	15. 100	15. 78	14. 200
15. 40	9 x 2 = 18	16. 7	16. 24	15. 40
16. 80		17. 20	17. 98	16. 80
17. 25		18. 5	18. 49	17. 25
18. 8	4. Uhhafu wa-20 yi-10	19. 35	19. 97	18. 9
19. 15	A-20 ehlukeniswe ka-2 yi-10	20. 140	20. 2	19. 15
20. 120	20 uhlukaniselwe a-2 yi-10			20. 120
INGXENYE YESIBILI	20 ÷ 2 = 10			INGXENYE YESIBILI
1. 84				1. 84
2. 72				2. 72
3. 32	5.Okukhethwe ngumfundi			3. 32
4. 51	6.Okukhethwe ngumfundi			4. 51
5. 94				5. 94
6. 19				6. 19
7. 104				7. 104
8. 39				8. 39
9. 77				9. 77
10. 2				10. 2

Ukusondezela nokulungisa: Imemorandamu			
Isivivinyo sangaphambili	Ishadi lomsebenzi 1	Ishadi lomsebenzi 2	Isivivinyo esandulelayo
INGXENYE YOKUQALA	1. 86	1. 85	INGXENYE YOKUQALA
1. 53	2. 47	2. 16	1. 54
2. 39	3. 29	3. 82	2. 39
3. 47	4. 69	4. 226	3. 47
4. 49	5. 97	5. 144	4. 49
5. 117	6. 40	6. 9	5. 148
6. 83	7. 2	7. 2	6. 83
7. 30	8. 1	8. 30	7. 30
8. 3	9. 400	9. 40	8. 3
9. 3	10. ulayini wezinombolo wokuqala	10. 80 – 40 + 1	9. 3
10. 2			10. 2
11. 71	11. 18		11. 31
12. 78	12. 31		12. 78
13. 41	13. 56		13. 41
14. 175	14. 165		14. 175
15. 37	15. 40		15. 37
16. 50	16. 20		16. 50
17. 1	17. 2		17. 1
18. 100	18. 1		18. 100
19. 200	19. 3		19. 200
20. 2	20. ulayini wezinombolo wesibili		20. 2
INGXENYE YESIBILI			INGXENYE YESIBILI
1. 63			1. 53
2. 45			2. 25
3. 125			3. 125
4. 135			4. 135
5. 294			5. 294
6. 9			6. 9
7. 2			7. 2
8. 30			8. 30
9. 40			9. 40
10. 80 – 60 + 1			10. 60 – 30 + 1

Ukuhlela kabusha: Imemorandamu			
Isivivinyo sangaphambili	Ishadi lomsebenzi 1	Ishadi lomsebenzi 2	Isivivinyo esandulelayo
INGXENYE YOKUQALA	1. 8 no-2	1. 102	INGXENYE YOKUQALA
1. 7 ne-3	2. 4 ne-6	2. 57	1. 7 no-3
2. 4 ne-6	3. 2	3. 300	2. 4 ne-6
3. 4	4. 20	4. 83	3. 3
4. 20	5. 36 na-64	5. 196	4. 20
5. 30 na-70	6. 45 na-55	6. 90	5. 30 na-70
6. 51 na-49	7. 12	7. 3	6. 51 na-49
7. 12	8. 14	8. 9	7. 12
8. 17	9. 6	9. 37	8. 17
9. 9	10. 38	10. 4	9. 9
10. 86	11. 157	11. 74 na-26	10. 86
11. 114	12. 12	12. 2 ne-5	11.132
12. 10	13. 9 na-21		12. 10
13. 8 ne-12	14. 17 ne-13		13. 8 ne-12
14. 4 ne-16	15. 120		14. 4 ne-16
15. 100	16. 8		15. 100
16. 9	17. 14 ne-6		16. 9
17. 18 ne-12	18. 12 ne-8		17. 18 ne-12
18. 14 ne-16	19. 13		18. 14 ne-16
19. 31	20. 40		19. 31
20. 40			20. 40
INGXENYE YESIBILI			INGXENYE YESIBILI
1. 104			1. 105
2. 78			2. 98
3. 300			3. 300
4. 106			4. 106
5. 178			5. 178
6. 70			6. 70
7. 6			7. 8
8. 58			8. 58
9. 3			9. 3
10. 88 ne-12			10. 36 ne-14

Ukuxhumanisa ukuhlanganisa nokususa: Imemorandamu			
Isivivinyo sangaphambili	Ishadi lomsebenzi 1	Ishadi lomsebenzi 2	Isivivinyo esandulelayo
1. 4	1. 5	1. 5	1. 6
2. 38	2. 48	2. 299	2. 38
3. 91	3. 85	3. 69	3. 91
4. 6	4. 8	4. 6	4. 6
5. 2	5. 3	5. 4	5. 2
6. 2 ne-9	6. 5 ne-8	6. 5	6. 2 ne-9
7. 11	(ukuhleleka kufanele) ne-	7. 34	7. 11
8. 297	13 kubhulokhi ephansi	8. 25	8. 297
9. 5		9. $130 - 52 = 78^*$	9. 5
10. 2	7. 198	10. $130 - 78 = 52^*$	10. 2
11. $20 - 5 = 15$	8. 6	*Izimpendulo zingashintshashintshana.	11. $20 - 4 = 16$
12. $15 + 5 = 20$	9. 3		12. $16 + 4 = 20$
13. $20 - 15 = 5$	10. 5		13. $20 - 16 = 4$
14. $5 + 15 = 20$	11. $20 - 3 = 17$		14. $4 + 16 = 20$
15. 3	12. $17 + 3 = 20$		15. 3
16. 2	13. $20 - 17 = 3$		16. 2
17. 43	14. $3 + 17 = 20$		17. 43
18. 8	15. 4		18. 8
19. 5	16. 3		19. 5
20. 7	17. 54		20. 7
INGXENYE YESIBILI	18. 8		INGXENYE YESIBILI
1. 4	19. 5		1. 5
2. 398	20. 7		2. 297
3. 87			3. 87
4. 7			4. 7
5. 2			5. 2
6. 3			6. 3
7. 27			7. 27
8. 18			8. 18
9. $120 - 37 = 83^*$			9. $120 - 53 = 67^*$
10. $120 - 83 = 37^*$			10. $120 - 67 = 53^*$
*Izimpendulo zingashintshashintshana.			*Izimpendulo zingashintshashintshana.

Ukuxhumanisa ukuhlanganisa nokususa Isifundo sokuqalisa 1: Umsebenzi womfundi ngamunye

$3 + 6 = 9 \checkmark$	$6 - 3 = 9 \times$
$9 = 6 + 3 \checkmark$	$9 - 3 = 6 \checkmark$
$6 + 9 = 3 \times$	$3 = 9 - 6 \checkmark$
$6 + 3 = 9 \checkmark$	$9 - 6 = 3 \checkmark$
$3 + 9 = 6 \times$	$3 - 6 = 9 \times$

Ukuxhumanisa ukuhlanganisa nokususa Isifundo sokuqalisa 3: Umsebenzi womfundi ngamunye

Bhala izinombolo zemindeni ezilandelayo kuma bha dayagramu afanele ngezansi. Bese ubhala imisho yezinombolo yokuhlanganisa neyokususa ngokwe nombolo yomndeni ngayinye.

$$5 + 5 = 10 \quad 3 + 4 = 7 \quad 11 + 1 = 12 \quad 2 + 7 = 9$$

<table border="1"> <tr> <td>2</td> <td>7</td> </tr> <tr> <td colspan="2">9</td> </tr> </table> <p>Ukuhlanganisa:</p> <p>$2 + 7 = 9$</p> <p>$7 + 2 = 9$</p> <p>$9 = 2 + 7$</p> <p>$9 = 7 + 2$</p> <p>Ukususa:</p> <p>$9 - 2 = 7$</p> <p>$9 - 7 = 2$</p> <p>$7 = 9 - 2$</p> <p>$2 = 9 - 7$</p>	2	7	9		<table border="1"> <tr> <td>11</td> <td>1</td> </tr> <tr> <td colspan="2">12</td> </tr> </table> <p>Ukuhlanganisa:</p> <p>$11 + 1 = 12$</p> <p>$1 + 11 = 12$</p> <p>$12 = 1 + 11$</p> <p>$12 = 11 + 1$</p> <p>Ukususa:</p> <p>$12 - 1 = 11$</p> <p>$12 - 11 = 1$</p> <p>$11 = 12 - 1$</p> <p>$1 = 12 - 11$</p>	11	1	12		<table border="1"> <tr> <td>3</td> <td>4</td> </tr> <tr> <td colspan="2">7</td> </tr> </table> <p>Ukuhlanganisa:</p> <p>$3 + 4 = 7$</p> <p>$4 + 3 = 7$</p> <p>$7 = 3 + 4$</p> <p>$7 = 4 + 3$</p> <p>Ukususa:</p> <p>$7 - 4 = 3$</p> <p>$7 - 3 = 4$</p> <p>$4 = 7 - 3$</p> <p>$3 = 7 - 4$</p>	3	4	7		<table border="1"> <tr> <td>5</td> <td>5</td> </tr> <tr> <td colspan="2">10</td> </tr> </table> <p>Ukuhlanganisa:</p> <p>$5 + 5 = 10$</p> <p>$10 = 5 + 5$</p> <p>Ukususa:</p> <p>$10 - 5 = 5$</p> <p>$5 = 10 - 5$</p>	5	5	10	
2	7																		
9																			
11	1																		
12																			
3	4																		
7																			
5	5																		
10																			

